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PHOTO-ERA MAGAZINE

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OF

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ARTICLES AND AUTHORS

Adapting a Verito to a Graflex. Herbert B. Fisher.....	123
Amateur-Opposition.....	300
An Obscure Cause of Staining.....	191
Barker, E. M. Remarks on Portrait-Films and Development.....	174
Base-Ball Photography. Leonard C. Lee, Jr.....	68
Blackham, M.D., George E. Simple Facts in Regard to Actinism of Light.....	121
Blumann, Sigmund. A Brief for the Amateur.....	238
Hobbies.....	80
Boston Y. M. C. Union Camera Club Exhibition, The. Ralph Osborne.....	10
Brief for the Amateur. Sigmund Blumann.....	238
Camera and Character.....	229
Carpenter, Thomas S. Florida Impressions.....	273
Cones, Nancy Ford. My First Photograph.....	132
Correll, H. W. You Push the Button.....	28
Dalzell, Dr. J. Moir. A Pearl of the Pacific.....	222
Davis, Frederick C. Reminders.....	182
Selling Your Photographs.....	219
Selling Your Photographs. What to Photograph.....	287
Davis, William S. The Pin-Hole and the Pictorialist.....	126
Desensitising Autochrome Plates Before Development. A and L. Lumière and A. Seyewetz.....	297
Development After Fixing. A. Streissler.....	236
Donaldson, Edwards W. Photography in a Coal-Mine.....	242
Eickmeyer, Rudolf. My First Photograph.....	76
Eitel, Theodore. My First Photograph.....	184
Experiences in Stereoscopic Photography. A. Jupenlaz.....	230
Fisher, Herbert B. Adapting a Verito to a Graflex.....	123
Florida Impressions. Thomas S. Carpenter.....	273
French, Wilfred A. My First Photograph.....	24
Gloucester Camera Club, The. Herbert B. Turner.....	173
Hanson, Raymond E. The Maid of Marblehead.....	3
Hayden, Emily H. My First Photograph.....	291
Hobbies. Sigmund Blumann.....	80
Illustrated Advertising and the Present Business Situation.....	294
It is All in How You Sit.....	241
Juvenlaz, A. Experiences in Stereoscopic Photography.....	230
Lee, Leonard C., Jr. Base-Ball Photography.....	68
Livelihood or Pastime? W. P. Mattern.....	75
Ludlum, William. Starlight. (Poem).....	29
Lumière, A. and L., and A. Seyewetz. Desensitising Autochrome Plates Before Development.....	297
Maid of Marblehead, The. Raymond E. Hanson.....	3
Mattern, W. P. Livelihood or Pastime?.....	75
McCowan, Dan. The Rocky Mountains Park of Canada.....	165
My First Photograph. No. 1. Wilfred A. French.....	24
No. 2. Rudolf Eickmeyer.....	76
No. 3. Nancy Ford Cones.....	132
No. 4. Theodore Eitel.....	184
No. 5. Wm. H. Zerbe.....	239
No. 6. Emily H. Hayden.....	291
Nature-Photography for Sport. Kenneth Dudley Smith.....	4
Osborne, Ralph. The Boston Y. M. C. Union Camera Club Exhibition.....	10
Pearl of the Pacific. Dr. J. Moir Dalzell.....	222
Photographic Bread Upon the Waters. Stockton Veazey.....	188
Photographic Diversions of a Landscape-Architect. Frank A. Waugh.....	26
Photography in a Coal-Mine. Edwards W. Donaldson.....	242
Pictorial Composition.....	285
Pilgrimage to Wolfeboro, N.H. Part 1. H. B. Turner and R. Osborne.....	57
Part 2. H. B. Turner and R. Osborne.....	111
Pin-Hole and the Pictorialist, The. William S. Davis.....	126
Practical Observations of a Photo-Finisher. Henry J. Wiegner.....	135
Remarks on Portrait-Films and Development. E. M. Barker.....	174
Reminders. Frederick C. Davis.....	182
Rocky Mountains Park of Canada, The. Dan McCowan.....	165
Selling Your Photographs. Frederick C. Davis.....	219
Selling Your Photographs. What to Photograph. Frederick C. Davis.....	287
Shamessy, Edward. True Education.....	78
Simple Facts in Regard to Actinism of Light. George E. Blackham, M.D.....	121
Smith, Kenneth Dudley. Nature-Photography for Sport.....	4
Speed-Limits.....	82
Starlight. (Poem.) William Ludlum.....	29
Streissler, A. Development After Fixing.....	236

True Education. Edward Shaunessy	78
Turner, Herbert B. The Gloucester Camera Club	173
Turner, H. B., and R. Osborne. Part 1. Pilgrimage to Wolfeboro, N.H.	57
Part 2. Pilgrimage to Wolfeboro, N.H.	111
Veazey, Stockton. Photographic Bread Upon the Waters	188
Waugh, Frank A. Photographic Diversions of a Landscape-Architect	26
Wiegner, Henry J. Practical Observations of a Photo-Finisher	135
You Push the Button. H. W. Correll	28
Zerbe, Wm. H. My First Photograph	239

EDITORIALS

Architectural Subjects—Advanced Competition. Closed October 31, 1921	144	Marines—Advanced Competition. Closed August 31, 1921	36
Beginner in the Country, The	38	Motion-Picture Vaudeville	30
Beginner and the Record-Picture, The	146	New Uses for Photography	249
Boston's Pictorial Wealth	45	Outdoor-Genres—Advanced Competition. Closed September 30, 1921	91
Brewster Free Academy	99	Pedestrian Picture-Making	193
Cameras Everywhere	216	Photo-Swindlers Rampant	85
Circulating-Albums	30	Rare Pictorial Opportunity	193
Civic Photographic Publicity	503	Some Painters' Idea of Pictorial Composition	139
Domestic Pets—Advanced Competition. Closed November 30, 1921	198	This is No Time for Discouragement	162
Exposure-Meters and the "Dull" Season	267	"What Have You to Show for It?"	92
Frank S. Noble	103	Who is Responsible?	200
High Ideals and the Beginner	310	Why Finish the Amateur?	249
Indoor-Genres—Advanced Competition. Closed December 31, 1921	254	Why Not a Photographic Reading Course?	201
Investing in Photo-Schemes	53	Winter-Sports—Advanced Competition. Closed January 31, 1922	308
Make Your Camera a Profitable Investment	256	Word to Our Advertisers	158
		Worthy Photographic Project	85

ON THE GROUNDGLASS

All is Not Gold that Glitters	46	Photography as a Profession	319
An Alluring Travelog	100	Profane Annotation	154
Another Replica	100	She Had His Number	208
Buried Over Mt. Monadnock	208	Strange Luncheon-Box	154
Case of Mistaken Identity	208	The Dangers of Poor Composition	319
Comparative Merits of Amateur and Professional	154	The Direction of the Eyes	46
Elon	154	The Patient Photographer	208
Ereaf Overexposure	264	The Stamped Return-Envelope	100
Frederick C. Davis's First Photograph	100	The Three Elevators	264
Home-Made	100	The Trials of a Model	264
Loyal Statesman	46	There Are Others	46
Novel Photo-Printing Toy	208	Views We Pass in the Day	319
Photographic Courage	264		

THE CRUCIBLE

Animated Cartoons and Sketchographs	313	Novel Stereoscopic Effect	259
Color Kinematography	149	Photographing Rainbows	259
Combined Development and Fixing	203	Photo-Stereo-Synthesis	259
Developing Cut Films	149	Protection from X-Rays	149
Developing Exposed Plates	95	Safranine in Developers	203
Developing Plates in Florida	313	Simultaneous Developing and Fixing	313
Direct Color-Photography in Medicine	149	Stereoscopic Projection	95
Duration of the Latent Image	41	The Nature of Light	41
Exposures and Panchromatic Plates	203	To Make a U.S. System Diaphragm-Seal for a Paneratic Telephoto-Lens	95
Grain in High-Speed Plates	149	To Preserve Labels on Bottles	259
Keeping-Qualities of Developers	203		

NEWS EVENTS AND MISCELLANEOUS

An Interesting Comment	266	Britain Imposes Duty on Imported Photo-Goods	266
An Unfortunate Coincidence	50	"Camera to Bare Secret of Mars"	270
Atmosphere and the British Coal Strike	107	Carrying-Cases	307
Behavior of Lenses	141	Cause of Unsharp Negatives	253

Classical Criticism.....	103	Our Flag.....	48
Clouds as They Are.....	202	Perspective and Angle of View.....	215
Coloring Prints of Autumn-Foliage.....	270	Photographing Blue Prints.....	53
Copying Sepia-Prints.....	207	Photography and Art.....	267
Fine-Art Essentials.....	160	Photography from a Train.....	106
German Photo-Goods in England.....	108	Preservation of Negative.....	148
Glycerine and Fading.....	215	President Harding.....	157
Height of the Camera.....	251	Print-Meters.....	258
Henry H. Turner.....	212	Relation Between Shutter-Speed and Lens-Stop.....	35
Herbert W. Gleason's Trip.....	104	Reliable Intensifier.....	197
Hypo-Dissolver.....	97	Renewed Interest in Printing-Out Paper.....	216
Idea for Increasing Business.....	157	Something New About Eyes.....	160
Illuminants in Enlarging.....	305	Such is Fame.....	211
Inaccuracies About the Pilgrims.....	40	Three Years Between Exposure and Development.....	161
Individual Photo-Finishing.....	103	Tribute to Pirie MacDonald.....	320
Is a Photograph a Graven Image?.....	49	Tripod Suggestion.....	148
Light-Distance and Exposure.....	205	View-Finders.....	87
Lighting and Exposure in Autochrome Work.....	195	Water for Photographic Purposes.....	312
Louis Fleckenstein.....	107	What is a Journalist?.....	160
Memphis Exhibit of Photography.....	104	When the Building Faces North.....	94
Mounting Prints.....	307	Word from Turin, Italy.....	49
Our Editorial Page.....	48		





THE MAID OF MARBLEHEAD
RAYMOND E. HANSON



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The Maid of Marblehead

RAYMOND E. HANSON

N the early chronicles of the American Colonies are to be found many romances readily adaptable to the epic poem or to the historical novel. Such stories as John Alden and Priscilla, John Smith and Pocahontas, Philip of Mt. Hope, and others have inspired some of our greatest writers with themes which have delighted thousands and passed into the folk-lore of the nation. The romance of Agnes Surriage of Marblehead, although comparatively unknown outside of the confines of the place of her nativity, has, nevertheless, romantic flavor and local color quite the equal of any of them.

Agnes Surriage was the daughter of poor fisherman of Marblehead,—a town in the days of the early part of the eighteenth century of primitive and, for the most part, rather lawless population of the fishing-sort. Not of the Puritan type, these fishermen of Marblehead! but rather—if we may credit Mr. Barnard, assistant-pastor of the First Church—"as rude, swearing, drunken and fighting a crew as they were poor!"

Of Agnes' childhood we know but little; history first reveals her as the poor scullery-maid of the Fountain Inn, which was situated, according to tradition, at the northern end of the town in what is now known as Barnegat, on an eminence overlooking Little Harbor. Here she worked at scrubbing floors; fetching water from the well (which is still shown to visitors); washing pots and pans in the kitchen and tasks of like menial nature; with time now and then to attend a house-raising or a wedding. On each of these occasions a veritable festival was declared, merriment ran riot, wine flowed copiously and the town danced itself delirious. One can picture her in odd moments of a long summer's day seated on the rocky Barnegat shore, or strolling leisurely at the water's edge, watching the fishing-boats riding peacefully at anchor in Little Harbor, or the sea-gulls careening over the bay, dreaming

dreams and building air-castles, as young girls do, but which doubtless fell far short of the high fate reserved for her.

In 1742 the erection of Fort Sewall was begun. Sir Harry Frankland, then collector of the port of Boston, journeyed to Marblehead to supervise its construction. In the afternoon of a hot summer-day he arrived, tired and dusty from his long ride over the rough country-roads from Boston, and repaired to the Fountain Inn. On entering, he was struck by the grace and beauty of a young girl engaged in scrubbing the floor. The man paused and observed the maid, and then noting the fact that her legs were innocent of stockings, inquired if she had none. Receiving a negative reply, he gave her some money to purchase a pair. He passed on, leaving poor Agnes on her knees before the bucket of soapy water, staring at the coins in her wet hands, and not without an admiring glance after the handsome stranger.

The next time Sir Harry encountered Agnes, was some three weeks later, when he came again to Marblehead. As before, the girl was scrubbing the floor, her legs still innocent of stockings. Frankland accosted her, inquiring if she had not bought the stockings, to which the maid replied that she had, but put them aside to wear Sundays. The man's interest in the maid went further. He learned her name and history, and, interviewing her parents, readily obtained permission to take her away to Boston and educate her. And so Agnes Surriage, the poor fisherman's daughter, nothing loath and, doubtless, in no little wonderment, left Marblehead in the company of the English noble and went to Boston.

Agnes was legally adopted, educated by private tutors, and dressed in all the splendors of the fashionable world of those days. Frankland, in the meantime, had become very much enamoured of his beautiful ward, and the feeling was reciprocated. The malicious gossips were not idle, and it was not long before people began to

look askance at Agnes. To avoid this annoyance, Frankland built a fine manor-house at Hopkinton where he removed, and he and his ward lived here happily for several years, attended by a large number of negro slaves.

In 1754 Sir Harry returned to London, taking Agnes with him, where, contrary to his expectations, his family and friends received her very coldly. From there they sailed to Lisbon, where the simple maid of Marblehead was introduced to the most exclusive circles of society in the city. This was in the year 1755; a year marked by the frightful catastrophe of the earthquake which toppled the buildings of the city to the ground in terrible destruction. It so happened that Frankland who was out for a walk was pinned under the timbers of a fallen building. While in this plight, he made a vow that should he escape from his perilous position he would marry Agnes Surriage. The latter, becoming alarmed for his safety, was at this time searching amid the confusion of the stricken city for her lover. Her search finally revealed the object of her anxiety; she called for help, and Sir Harry was rescued. True to his oath, the nobleman married the maid, who now became Lady Frankland.

On returning to London they were heartily welcomed by Frankland's family, and Agnes was received and admired by the first society of the English capital.

In 1757 they were again back in Portugal, Frankland having been appointed Consul General. In 1763 they recrossed the Atlantic and resided in Boston until Sir Harry's death in 1768. His sorrowing widow retired to her estate at Hopkinton, and lived quietly, admired by all for her beauty, kindness and generosity. She did

much for her family and friends in Marblehead, always remembering with affection her early association in the little fishing-town.

At the outbreak of the Revolution, she set out for Boston to go to London; was held up by a patrol of Continentals, who, on learning her identity, permitted her coach to proceed.

On arriving in Boston, she found the town in a state of feverish excitement. Red-Coats and gold lace swarmed on all sides. The heights of Bunker Hill were to be taken on the morrow! From the window of her lodgings on Beacon Hill she watched the Red-Coats storm the hill; saw the battle-smoke rise as the red line neared the top; the red line wavering, breaking and retreating in panic from the deadly musketry on the hill-top. With what thoughts she watched the progress of the battle—we can but imagine—with eager interest at any rate, until the close when the decimated regiments finally attained the brow of Bunker Hill and the Continentals retreated for lack of gun-powder.

On arriving in England, she took up her residence in London; where some time later she married John Drew, Esquire, a wealthy banker. Upon his death she retired to Hopkinton, Massachusetts, where she lived, beloved by all who knew her, until her death.

Such, briefly, is the tale of the Maid of Marblehead. The picture of the same title that accompanies this article, was made in an attempt to depict her as she may have appeared in her youth on the rocky shores of Barnegat in Marblehead. The spot on which the photograph was made is at the base of the rocks on the shore, but a stone's throw from the well from which she was accustomed to draw water for the Fountain Inn.

Nature-Photography for Sport

KENNETH DUDLEY SMITH



My debut in Nature-Photography was rather startling—so exciting that I wager not one would care to duplicate my experience. It happened ten or so years ago in the Adirondacks when I was a member of the Boy Scouts. I was entertaining a friend who did not belong to that worthy organization; consequently I knew he did not have the humane and protective feeling I had toward wild animals. We were out hunting with our cameras and Nesbit and I had somehow strayed apart. When I discovered him, he appeared to be bending over something which he seemed to be endeavoring to photo-

graph. "This will never do," I thought, "I bet he has found some animal and is scaring it to death." I ran up to where he was and found him making a picture of a black-and-white animal which had injured itself by stepping into a trap. Somehow I forgot photography; my Boy Scout philosophy and its good turn daily was all that I could think of. By liberating this misguided animal, I knew I would do a good turn and one which I doubted any Boy Scout had done before. Before Nesbit had time to make his second picture, I bent over to release the trap. Suffice it to say, I acquired my first dose of Nature-Photography.



THE MONARCH BUTTERFLY ON CLOVER
KENNETH DUDLEY SMITH



HUMMING-BIRD

KENNETH DUDLEY SMITH

Since then, I have sought the more delicate side of Nature and have spent my spare time photographing humming-birds and butterflies. I prefer to obtain these in action, as that lends more zest to the sport. And sport it is, for it furnishes many thrills. The camera for such work must be necessarily of high effectiveness and should possess a shutter that works to the best advantage. A focal-plane shutter is virtually indispensable. Ability to see the image, natural size, up to the instant of exposure, requires a camera of the reflecting type. Our American-made Graflex—the $3\frac{1}{4} \times 4\frac{1}{4}$ Revolving-Back Auto Graflex—has no equal for such work. It has the advantage of double-extension bellows, so that life-size pictures of small objects may be made; this is a necessity for insect and small flower-studies. To get the maximum efficiency from a camera of this type, it must be equipped

with an F/4.5 lens and it is wise to select one of sufficient focal length so that the angle of view be about 35 degrees. There are many reasons for this, the most important being that it makes a larger picture of the subject we are photographing; the smaller the angle of view—the longer the focal length of the lens—the greater the size of the object photographed. A fast plate is also a necessity and I have found but few that suit me. An English plate, Wellington Anti-Screen, Backed and an American, Cramer Instantaneous Isochromatic, both of which are orthochromatic and so give good color-values, are the two which I have found best suited to my work. No doubt some prefer others. After all, it really comes down to the one we get most accustomed to employ. By using a Magazine Plateholder, twelve may be carried at one time and it saves the bother of changing plateholders after each exposure.

In butterfly-photography, while pursuing these elusive creatures, there is furnished all manner of sport that one could desire. My first attempt was to pursue, or rather chase, a tireless Monarch butterfly on a hot, humid summer-day; it would not pose for me, lingering only a moment or two on the flowers it touched. These few rests allowed me to catch up with it; but it waited only long enough to be sure that I was not lost, then it would start again on its dizzy flight. When at

made a beautiful picture to look upon. But in a black-and-white photograph we would lose their beautiful color, miss the movement of their wings; in other words, we would have a picture that would not create a great deal of interest. But if these creatures were shown in action, it would be a picture that would always attract interest—action-pictures always have the power of calling attention to themselves. I approached the group slowly and when about three feet away



SILVER-WING BUTTERFLY

KENNETH DUDLEY SMITH

last, I succeeded in getting a picture, it was uninteresting because of its offensive background. Lesson one was learned; that it was unwise to make a picture with a background that distracted and called attention to itself. If this is done, the subject sinks to secondary importance and instead of the eye being caught and held by the subject of our photograph, it will wander about. It is, indeed, difficult in Nature-Photography to get plain backgrounds; but with time and patience we may succeed in anything.

The latter part of May, on the shores of an Adirondack lake, I discovered a dozen or so Yellow Tiger butterflies drinking from the moist sands. As they moved about slowly raising and lowering their beautifully colored wings, they

focused the Graflex carefully upon them; now all was ready. To startle them into flight, I kicked some sand toward them. At the same moment, I released the shutter of the camera and my picture "Fairy Airplanes" is the result. It was pure luck to have the two butterflies form such a charming pictorial composition. Usually, it is a guess as to whether we have succeeded in capturing their likeness on the plate. One good picture from a dozen attempts is a ratio to be proud of in butterfly-photography.

In middle October, on the shore of the same lake, I found a group of Mourning Cloaks thawing out in the sun after the chill of the night before. As they were still in a semi-frozen state, it was easy enough to pick one up in my fingers



FAIRY AIRPLANES
KENNETH DUDLEY SMITH



and make a portrait of it in that manner. By getting up early after a cold night and going out and finding one or two butterflies that are yet chilled through, it is easy enough to pose these as willing models. Also, they will pose well after coming out of their chrysalis; their wings are still damp, and I obtained my Monarch butterfly on the clover in that fashion. By making pictures in this manner, they can be arranged as we think best; the background and lighting can be of our own choosing. Many camerists, in order to make still-photographs of butterflies, will kill before they pose them. In most instances, such workers are poor sports. I believe they would pose stuffed animals in their natural habitat and pass them off as made in the open woods or fields.

There are always butterflies visiting the flowers in a garden; and it is easy enough to photograph them on a flower, if a little patience is used. Life-size pictures of the smaller butterflies may be made by racking out the bellows to twice the distance of the focal length of the lens. If the lens is of seven inches focal length, it is necessary to have the bellows extended fourteen inches. This was done in the case of my "Silver Wing on the Sweet William."

Exposure will vary, and depend on the action and amount of light. It is advisable to give 1/1000 of a second when the butterflies are in flight, otherwise the wings will be blurred. Most likely, the first attempts will be failures; but success comes after a few trials. The editor of a photographic magazine in criticising my first butterfly-picture remarked, "The only praiseworthy thing about the picture is your attempt."

Humming-bird photography is a little different from picturing butterflies. The idea I used in making my pictures was to find a flower that I knew the bird always visited. Then the Graflex was placed on a tripod and put about three feet away from the flower. After focusing on it, a fishline was attached to the release and I moved about fifty feet away and hid myself under a tree. The shutter could be released at any time by giving a pull to the line. Fishline was used instead of cord because of its great strength. When the bird came to the flower, all I needed to do was

to give a tug to the line, and I knew just when I had captured its likeness on the plate. At first, the noise of the shutter unwinding would frighten away the bird; but after a dozen or so pictures, it paid no attention to the noise. It is best to take a position directly back of the camera; for then the camerist can see what position the bird is in and how it will appear on the plate. In other words, he gets the same viewpoint as the lens. Here it is also a matter of guess as to how the picture will turn out. The wings move so rapidly that I never know in what position they are until the plate is developed. The 1/1000 of a second does not always stop the motion of their wings, as they vibrate at such an enormous rate of speed per second.

There were two humming-birds that visited our garden in the Adirondacks; they appeared singly at intervals of about twenty minutes. As far as I could make out, they had a definite route; they started at Harris', came south to our place and then continued down to Murrays', then the program would be reversed and it so happened that sometimes the two birds would meet in our garden. The smaller one, with the ruby throat, always chased the other away; and, as it did so, it would make a peculiar, angry buzzing noise. One day I was hidden under a wild cherry-tree a few feet from the garden in order to observe the birds as closely as possible. The larger one had just arrived, when the ruby throat appeared. Instead of taking refuge in flight, as had always been the case before, it hid on a stem of one of the flowers a few inches above the ground. Then I saw how small the birds really are; with their wings in motion, it gave them the appearance of being twice their regular size. Somehow the ruby throat sensed the other being there and buzzed back and forward above the garden, trying, it seemed, to find the other. After a short time, the larger one came to the conclusion that flight was the better course and left, flying a scant foot above the grass, and trying as usual to escape observation. Rain or shine, the birds came every day throughout the summer; and, needless to say, my whole family enjoyed their visits.





THE DANCER

B. Y. M. C. U. CAMERA CLUB

RALPH OSBORNE

The Boston Y. M. C. Union Camera Club Exhibition

RALPH OSBORNE

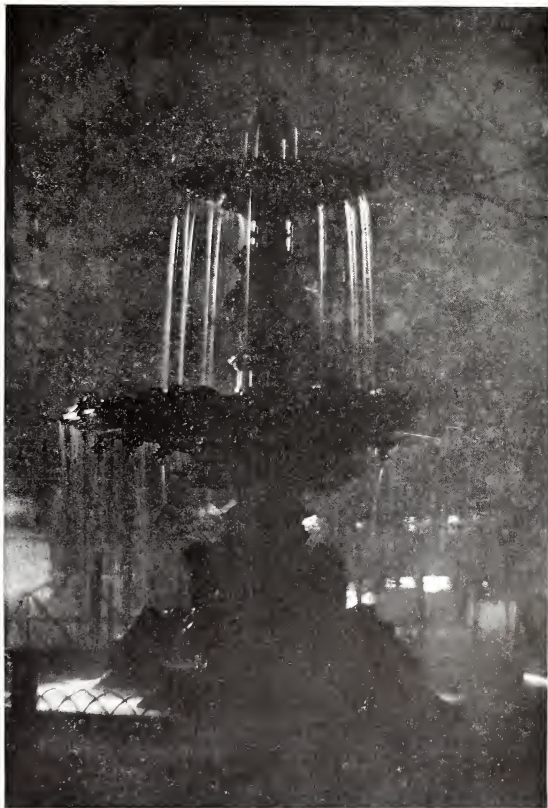
THE annual exhibition of the Camera Club of the Boston Young Men's Christian Union took place April 4 to 16, in Union Hall. Never, of late years, at least, has Boston made a larger or better showing, photographically, and the results reflect great credit upon the Camera Club in general, as well as upon its individual members. The only requirements for a print to be shown were that it had never been shown before by the Club, was not more than 11 x 14, nor less than 5 x 7, and that it came up to the standard set by the art committee. It is of interest to note that the committee did not exclude a single print. In all, two hundred and sixty-three prints were shown, most of which were enlargements.

The exhibition was formally opened by His Excellency the Governor of Massachusetts, who viewed the prints and was highly gratified with the work shown. Earlier in the day, the pictures were judged and awards given by a jury comprised of Wilfred A. French, Ph.D., managing-editor of PHOTO-ERA MAGAZINE; Theodore M.

Dillaway, landscape-painter and instructor in art in the public schools of Boston, and F. A. Sanderson, photographic expert. The task of the judges in an exhibition of this nature is, to say the least, a thankless one, and the Club considers itself extremely fortunate in obtaining the services of these eminent gentlemen, whose decisions, they felt, were entirely just and fair, and to whom they owe their deepest gratitude.

Each exhibitor was given a separate wall-space arranged in alphabetical order. The first print mentioned by the jury was a portrait by George S. Akasu, of excellent quality and delightful ease of pose. Mr. Akasu has admirably depicted the young lady's evident joy of living, and one is sure that she finds this old world a pretty good place to live in, after all.

The outstanding quality of Mr. Harold E. Ahuy's "Dawn" is one of mystery. It represents a very beautiful nude figure in a pose of easy relaxation sitting before an open window of Moorish design. Indeed, the whole interior is one which at once calls forth the question, "Where in



FOUNTAIN AT NIGHT
HENRY SHAW
B. Y. M. C. U. CAMERA CLUB



GLOUCESTER FISHERMEN

RALPH OSBORNE

B. Y. M. C. U. CAMERA CLUB

these United States could such a picture have been made?" for it seems to be a corner of a sultan's palace. The truth of the matter is, however, that the "palace" interior was made of toy building-blocks, such as children play with, whereas the "beautiful lady" is a tiny statue of china, not over four inches long. The quality of the print is excellent, and both the posing and lighting arrangements are handled with great skill.

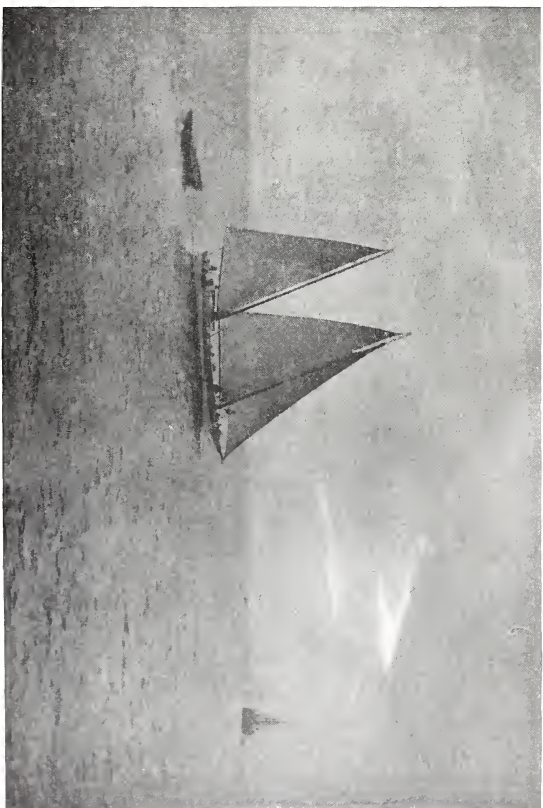
The first prize in the portrait-class went to Mr. Astrella for his portrait of Mr. Kiley. It represents an elderly man enjoying a quiet pipe and is an admirable character-study. Mr. Astrella was also awarded four honorable mentions, one for a striking portrait of Mr. Manson; "The Last Nail"—a well-composed picture of a blacksmith shoeing a horse; "Three Thousand Ducats and Antonio for Bond," and "Christ or Mammon," both being examples of the still-life photography for which Mr. Astrella is so justly admired.

Mr. Burwell showed six splendid prints, five of which were winter-scenes, the sixth being a delightfully sunny landscape. His "Winter," "Shadows," and "Summer" gained honorable

mention and were most excellent in their gradation of tones, composition and originality.

De gustibus non disputandum is undoubtedly true; yet few, indeed, there are who could possibly gainsay Mr. Henry Eichheim's right to the gold star—given for the best print in the exhibition. This was awarded to his "Hangchow" which also won first prize in the genre-class. In the foreground is a Chinese fisherman propelling his *sampau* through the shallow lake by means of a long pole. Behind him, nearly obscured in haze, is an island, upon which can just be distinguished a temple, while in the distance is just the suggestion of a mountainous outline. The whole is done in a very high key, yet it is full of mystery and charm. The planes are beautifully separated, and the lines and tones could not be improved. In short, it is soul-satisfying in its exquisite simplicity and beauty. All honor to its author. Scarcely less beautiful than "Hangchow" is "Yangtze River," also by Mr. Eichheim. This was awarded honorable mention, as was his portrait of Kita Minoru, the Japanese actor.

Mr. Victor D. Elmore carried off three honor-



BUG-EYE

B. Y. M. G. U. CAMBIA CLUB

W. L. MANSON



FROM THE SHORE-PATH
O. R. PERRY



able mentions. "The Breath of January," as to subject, is commonplace in the extreme, but has been very artistically and poetically treated. It shows a horse and wagon being driven under a railroad-bridge, the whole scene enveloped in the cold mist of a wintry morning. The steam which issues from the horse's nostrils and from whence the title is derived, gives a very pleasant highlight, without which the picture would lose notably. Perhaps, the greatest praise it could receive is the fact that it at once instils in the minds of other photographers the desire to go out

Mr. Gustavson is another of the younger members, who does more than ordinarily good work. His three prints, although not mentioned by the jury, show a truly artistic treatment of his subjects; his "M. I. T." is an especially pleasing view of a bit of one of the Massachusetts Technology buildings made on a misty day.

To no other man does the Club owe so much as to Mr. Arthur Hammond, one of its earliest members. He has ever been ready to lend a helping hand to those who are trying out their photographic wings, and his writings on photographic



MALLARD DUCK

B. Y. M. C. U. CAMERA CLUB

W. J. JAYCOCK

and try to make artistic pictures from similar, every-day subjects. Two other honorable mentions were awarded Mr. Elmere, for an excellent study of a head, which he calls "Entreaty," and a nude study. Mr. Elmere is one of the youngest members of the Club and should go far, for his work already shows great originality as well as an excellent technique.

It is to be regretted that Mr. Chester Grillo has found time to make but one print for the exhibition; for this print, which represents a girl in a graceful posture writing on the sands, makes one wish to see more of his work.

subjects are of the greatest value not only to the Club members, but to hundreds of advanced workers as well as to amateurs throughout the English-speaking world. In past years, Mr. Hammond has carried off all honors at the Club exhibitions; but, unfortunately, his literary work has of late so encroached upon his time that he has been unable to prepare any exhibition-pictures. Those that he showed, however, were of excellent quality, whereas his composition—a subject on which Mr. Hammond is an authority—was a lesson to all who examined his work. One of the most memorable, as well as admirable prints



MISS G.

GEORGE S. AKASU

B. Y. M. C. U. CAMERA CLUB

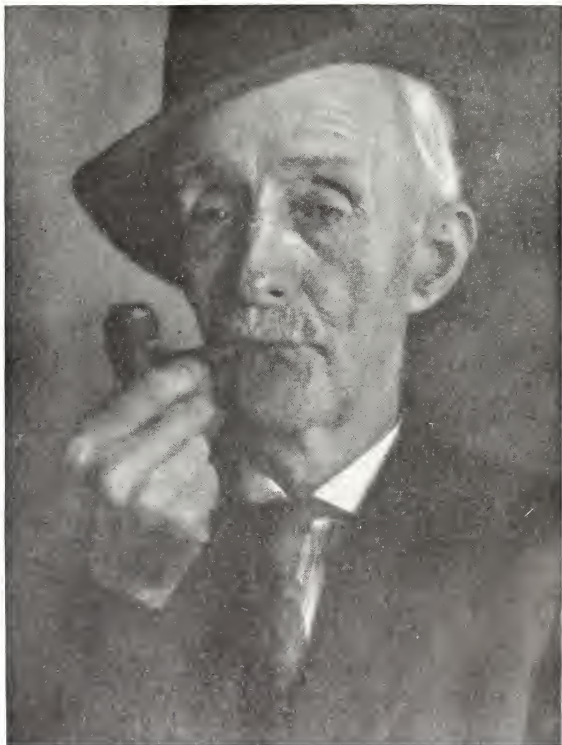
in the exhibition was his "Dories in Annisquam River," which was honorably mentioned by the jury.

"Evening on the Shawsheen," by Mr. Raymond E. Hanson, was awarded second prize in the landscape-class. It is a thoroughly delightful print in which the planes are exceptionally well separated and the tones are exquisitely blended. His nude study, "Halcyon," and landscape, "Opulent Autumn" received honorable mention. "Winter-Sunset" lingers long in the memory for its scintillating reflections on the crusted snow; and here, as well as in all his other prints, Mr. Hanson shows that he is keenly appreciative of the decorative value of clouds. The skill with which he has chosen his view-points, as well as his admirable technique, proclaim him a pictorialist of true merit.

Mr. E. C. Howard received honorable mention for his realistic night-scene, "Swallowtail at Midnight." It represents a light-house reflecting its ray in the quiet waters beneath the cliff upon which it stands. It is a very clever bit of night-photography.

The first prize in the marine-class went to Mr. W. L. Manson for his picture of a small sail-boat gliding through calm waters, towards Bug-Eye light-ship, Hampton Roads. The balance is maintained by the relative sizes of the sail-boat in the foreground and the light-ship in the distance, while the composition is greatly helped by the rift in the clouds, midway between the two ships, giving just the touch to make a harmonious whole. The print is a platinum—the only one, in fact, in the exhibition.

Here, the present scribe begs leave to quote



MR. KILEY
LOUIS ASTRELLA
B. Y. M. C. U. CAMERA CLUB

Mr. Arthur Hammond, who is also writing a description of the exhibition. "Mr. Ralph Osborne's work is particularly interesting by reason of its variety. In the twelve pictures hung are examples of portraiture, landscape, marine, genre and the very popular 'toyland' photography. In all of these different branches, Mr. Osborne has attracted the attention and commendation of the judges and seven out of the twelve pictures have received tangible evidence of approval. He has

way. It is a portrait replete with character. Equally interesting is the portrait of 'Miss M. M.' in which the lighting is very interesting and effective."

Mr. Osborne R. Perry showed eight excellent prints, two of which were awarded honorable mention. "From the Shore Path" shows a charming vista through which one sees a tiny harbor with a sail in the distance lending the necessary accent. The drawing, although firm, is soft



NUDE-STUDY

VICTOR D. ELMERE

B. Y. M. C. U. CAMERA CLUB

been awarded a second prize in both the marine and genre classes, and honorable mention for a very effective landscape, "The Fens at Dusk," a picture that is filled with the spirit of evening. The well-arranged toyland-study, "Suspicion," also received honorable mention, as well as three of the portraits. In portraiture, Mr. Osborne shows unusual discrimination and a sense of fitness in adapting his methods of treatment to his subject. His portrait of Madame Sundelius is dignified, simple and impressive. In his picture of 'Betty' the pose, the lighting and general treatment are entirely in keeping with the childish innocence and beauty, and the strong virile head of 'Dr. M.' is accorded a vigorous lighting-scheme which is handled in a masterful

enough to give a highly artistic feeling to the scene. "Chattering over the Stony Way" represents a stream wending its turbulent way through a dense wood. Here Mr. Perry has taken advantage of the S-curve of the stream to make a very attractive composition.

The child-portrait of Mr. Joseph A. Riley was particularly attractive. He succeeded in catching the quizzical expression of the little one and brought out the childish personality in a very marked degree. He richly deserved the honorable mention awarded him by the jury.

Mr. Gustav H. Seelig's "Decorative Winter" received first prize in the landscape-class. It represents a small portion of a frozen stream and its snow-covered banks. A bare branch, spread-



PORTRAIT

M. L. VINCENT

B. Y. M. C. U. CAMERA CLUB

ing over the upper portion of the picture, aids in the originality of design. Mr. Seelig has long been known for his remarkable snow-pictures, and in this one he has repeated the exquisite ton-quality of his other pictures of this sort. No less striking in this respect is his "Fenway Japanese," which was awarded honorable mention, as were his "Daybreak," "Early Spring," and his amusing toyland-picture, "Moonshine."

The first prize in the general class was given to Mr. Henry Shaw for his "Fountain at Night," a "close-up" of a fountain illuminated from the side by the electric street-lights. The streams of water which pour down from its top are strongly lighted and offer a repetition of bright accents which lend great character by their contrast to the black shadows of the fountain. The reflection of a distant, unseen street-light gives another

accent to the composition which greatly adds to its beauty. Mr. Shaw was also awarded honorable mention for his "Portrait," a large head of a young lady in street-dress; "Study," a bust of the same model in costume; and "In the Dunes," a print in subdued tones showing a nude figure back to the camera in the foreground and a heavy sand-dune beyond. Mr. Shaw has made a splendid showing, and should receive especial commendation for his originality in pose and excellence in treatment of his subjects.

One of the finest, as well as one of the most interesting exhibits is that of the president of the Club—Mr. Herbert B. Turner. Although Mr. Turner makes a specialty of picturesque corners in the various cities and towns he has visited throughout the world, he has shown, besides eight prints of this character, one genre, one ma-



STREET IN ALBI, FRANCE

HERBERT B. TURNER

B. Y. M. C. U. CAMERA CLUB

rine and one portrait—a sufficient diversity of subjects to prove that he is likewise a master of these various branches of photography, as well as his chosen branch. Perhaps, the most striking example of his work is a "Street in Albi, France." It is an 11 x 14 print on rough bromide paper with the exquisite quality and gradations of a gum-print. The shadows are filled with detail, at the same time losing nothing in the detail of a distant tower in full sunlight. The print is technically perfect, and it is little wonder that it was awarded a second prize in the general class. Scarcely less excellent in composition and technique are the "Harbor at Bridgton, Barbados," "Valley in the Pyrenees," "Le Puy," and "Munich," all of which were honorably mentioned by the judges, as was "Wonderment"—a delightful nude study done in soft tones, and "Milan," as fine a church-interior as one could wish to see.

Mr. M. L. Vincent, a former president of the club, was awarded second prize for his portrait of a young lady, done in delicate tones and soft gradations. The posing is particularly happy, avoiding, as he has, any eccentricities of posture. In fact, there is little to be desired in this or, indeed, in any of the prints he has shown. Mr. Vincent has not made mere maps of his models' features, but has succeeded in also portraying their personalities. He has reached such a degree of excellence in the making of portraits, that should he wish to forsake his present occupation in the printing-industry, he would be welcomed into the photographic profession as a portraitist of the first order.

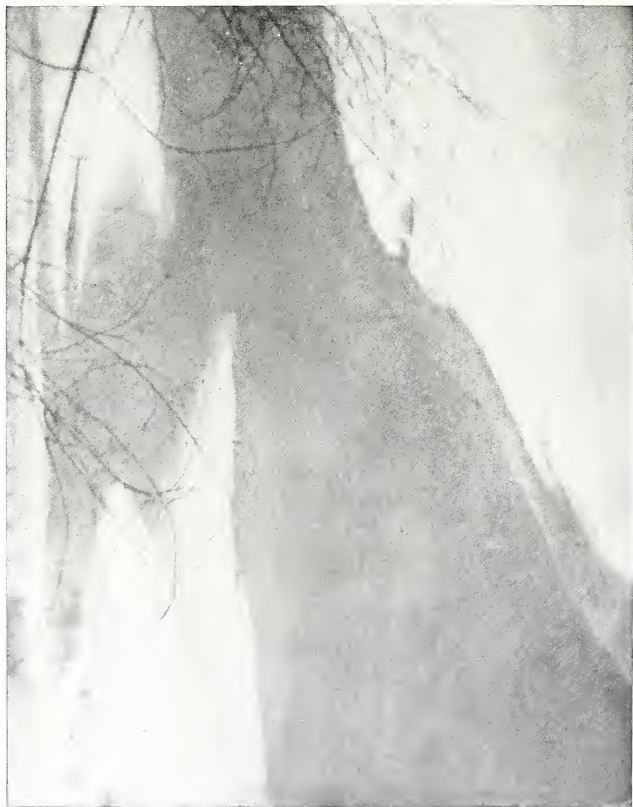
Honorable mention was given Mr. W. J. Jaycock for his superb picture of a mallard duck raising itself out of the water and flapping its wings. Mr. Jaycock is, indeed, to be congratulated on

HANGCHOW

B. Y. M. C. U. CAMERA CLUB

HENRY EICHHEIM





DECORATIVE WINTER

B. Y. M. C. U. CAMERA CLUB

G. H. SEELIG



EVENING ON THE SHAWSHOEN

RAYMOND E. HANSON

B. Y. M. C. U. CAMERA CLUB

seizing just the right moment to make this difficult exposure.

One of the greatest inspirations to the members at the present time, however, is the goal, not far distant now, of new quarters in the building about to be erected by the Boston Young Men's Christian Union. Here they will have a studio with facilities for artificial, as well as daylight lighting, and commodious rooms for every branch of photographic work, whereas their equipment will be absolutely up to the minute. Its members have determined that theirs shall be a camera club second to none in the country, and, judging from the standard set by this exhibition, they are in a fair way to make good their determination.

The Union Camera Club has every reason to be proud of this, its largest and finest exhibition. It will serve to spur its members on to even better work, for there is no more wholesome way to judge of one's own work than to compare it with that of others. The members have determined that theirs shall be a camera club second to none, and judging by the standard set by this exhibition, they are in a fair way to make good this determination.

The Boston Young Men's Christian Union

will soon move into its new million-dollar home in Park Square. Here the Camera Club will be provided with spacious quarters including a studio, lounge, and darkrooms for developing, printing and enlarging, which will be supplied with photographic equipment which will be absolutely up to the minute. As the new Union will have one of the best buildings of its kind in the world, so also will the quarters of the Camera Club be unsurpassed, and will aid materially in giving this Club its rightful place in the front rank of such organizations of the world.

The Club has just established an Honorary Fellowship, as an award and mark of appreciation to be bestowed on any person, who, in the opinion of the Club, has added materially through personal achievement to the advancement of the art of photography in any of its branches. The number of persons holding such fellowships shall at no time exceed twelve. This title, the highest honor the Club can bestow, is not restricted to the photographers of America, but can be given to any worker outside of the United States. The first to receive an Honorable Fellowship is Mr. John H. Garo of Boston.

My First Photograph

WILFRED A. FRENCH

Number One

THE wetplate-process was in its highest state of development and success when such men as Sarony, Rocher, Gutekunst, Landy, and Ryder were imparting luster to the glorious profession of portrait-photography in this country. It was the brilliant work of these master-photographers, and others in the field of landscape and marine, that awakened in the breasts

I took a hand in preparing and bottling developing-solutions—potassium oxalate and protosulphate of iron. This was in 1877. Soon, I was seized with a longing to create pictures by means of photography, for my parents, friends and former school-teachers seemed to think that I had pronounced artistic taste. That very summer, I took a vacation and a complete $3\frac{1}{4} \times 4\frac{1}{4}$ outfit. My friend, Mr. C., and I selected Lanesboro, a



MY FIRST PHOTOGRAPH

WILFRED A. FRENCH

of many young picture-lovers a desire to express, through a similar medium, their artistic feelings and aspirations. The somewhat cumbersome apparatus and the accompanying laborious and messy operations, however, did not appeal to the sense of dignity and ease of these fastidiously inclined aspirants. But with the advent of dryplates and convenient field-cameras, the amateur-photographer came into being, and, with him, a new industry and a new pastime. About this time, I had entered my father's employ to learn the photo-supply business, and was watching the clerks, particularly, as they assembled the various articles and material which constituted an amateur's photographic outfit.

village in the Berkshire Hills, as our stopping-place. Little did this quiet hamlet dream that it was destined to become famous in the history of photography! The farm-house where we stayed sheltered a young married couple, Mr. and Mrs. H., their little child, Mr. H.'s sister-in-law Miss L., and her friend Miss B. No sooner did they discover that I owned a photographic outfit which I was going to learn how to use—although they did not know that this was to be my very first photographic venture—than they clamored for a family-group. I had already improvised and equipped a darkroom in the barn near the hayloft and, as the day was fine, I arranged the much-talked-of group under a

nearby elm. It comprised Mr. H.'s entire party of five persons, which my friend Mr. C. was invited to join. Of course, I placed handsome Mrs. H. in the middle. I was delighted with the composition—a little symmetrical, I thought; but had I not seen similar compositions by Raphael, Correggio, Tintoretto and Botticelli only the year before, in the art-galleries of Europe? Judging by the plate in my plate-holders, the time of day and the lens on my camera, I calculated the required exposure to be about four seconds; and this proved to be right. Having made the exposure, I rushed with the plate to the barn and into that wonderful, magic room. I lighted the pocket ruby-lamp with its meager six inches of illuminating-surface; poured out four ounces of the potassium oxalate, to which I added one ounce of the iron solution, and two drops of bromide; placed the exposed plate in the tray—my! how my hand trembled—poured the mixture over the plate and eagerly awaited developments. I could hear my heart thump, as the highlights began to appear and the figures gradually took shape—all according to the book. In a few minutes the picture was completed, only reversed. I held it up to the ruby-light and gave a shout of joy that must have startled my eagerly waiting friends. I then stepped outside and held the negative up against the sky; but, though everything was clear and distinct, the plate had a milky, opalescent appearance. Thinking that I had made a mistake, somewhere, I threw the plate away and heard the sound as it broke in pieces. Then I remembered that in my excitement *I had forgotten to put the developed plate in the fixing-solution!* I said nothing, but quickly rearranged my group, exposed another plate, hastened with

it to the darkroom, and had the immense satisfaction to see the plate behave just like its predecessor. I rinsed it and, this time, placed it in the hypo-solution. In fifteen minutes I took it out, found to my delight that it was clear and distinct, quickly gave it a rinse and rushed outside with it. My friends had anticipated me, for they were waiting in the barn, below. They were just as excited as I. It was only with difficulty that I saved the precious plate from being ruined by eager and promiscuous handling. I went back, gave it a good rinsing and stood by—for nearly an hour—while it dried. The dinner-bell rang in vain. I remained and made several blue-prints, the only medium I had brought with me. The second group was not so successful as the first. It had been arranged hastily—more stiffly and symmetrically and, worse than that, the child had moved horribly during the necessarily long exposure; but the result created a sensation among the members of the group. Hence, it is with extreme reluctance that I permit the picture to be published. But, say what you will, that day in August, 1877, lingers in my memory as long, as vividly and as pleasantly as any that is associated with my experience in sport, travel and art.

(This is the first of a series of personal experiences, under the above caption, related by well-known photographic workers. As those who were approached on this subject were reluctant to disclose possibly embarrassing incidents connected with their positively first photograph—if, indeed, they could recall all the details after the lapse of many years—it was suggested that the Editor start the series on its course. And he has not been found wanting. Next!

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WILD ROSES

FRANK A. WAUGH

Photographic Diversions of a Landscape-Architect

FRANK A. WAUGH



VIRTUALLY every trade and profession makes use of photography. In some professions these applications have been highly specialised, as for instance in the use of the X-ray in surgery. Yet it has often seemed to me that photography comes to its fullest use in the profession of landscape-architecture.

The landscape-architect is above all else a pictorialist. It is his business to build landscape-pictures. Every item of his work therefore becomes immediately food for the camera.

Naturally, the landscape-architect always desires to keep a record of his work while it is under construction. Every feature of the engineering, building and planting can be easily photographed and recorded. But this is only what every architect and every engineer is constantly doing.

What is more fundamentally important to the landscape-architect is the study of composition. If he is an artist in any sense, that is, if he is a landscape-architect at all, it will be necessary

for him to go beyond mere matters of practical construction and to reach eventually an artistic composition. Now the study of pictorial composition in the landscape is the field most directly open to the photographer. At the outset, the photographer and the landscape-architect are thus at one in their chief endeavor.

There is, in short, no way in which a landscape-composition can be so effectively studied as by photography. A good photograph gives a great deal more than the mere perspective—the relationship of mass to mass, of sky to foreground, of sky-line to ground-line, etc. It gives an absolutely reliable report of light and shade, what the artists used to call *chiaroscuro*; and this display of light and shadow is perhaps, next to mass-composition itself, the most important subject-matter of the landscape-designer. The photograph also shows textures and gives a very good approximation of color-values.

There are always to be considered, further, the artistic modulations of atmosphere. Possibly, one of the greatest advantages which the land-

scape-architect enjoys, as compared with other artists, lies in the presence of atmosphere in his pictures. But he certainly will not be very much of an artist unless he studies these atmospheric effects and learns how to turn them to his own advantage. If his skill in photography keeps pace with his technique in landscape-architecture, he should be able to make a critical study of atmospheric effects for his own constant improvement and to interpret them for his

landscape, whether natural or artificial, is its photographability—to coin an abominable, but very useful, word. If we make a comparison of two areas of park-land of 500 acres each, we might well judge that one the better which contains the largest number of good photographable pictures as shown by the camera. In other words, it is the problem of the landscape-architect to build the largest number of possible pictures, supposing them all to be consistent



NEW ENGLAND ASTERS IN WINTER

FRANK A. WAUGH

clients, this latter undertaking being a matter of no small consequence.

Quite possibly, the most important service of the camera in the hands of the landscape-architect is the forcing upon him of the study of definite points of view. Virtually all laymen and too many professional landscape-improvers carry in mind nothing but a fluent landscape. It is always developing before their eyes; it never takes any certain forms because it is never studied from definite points of view.

Quite certainly, one of the very best tests of

with the main theme, upon every piece of land placed in his hands.

The study of landscape-photography, therefore, in its most advanced pictorial aspects, may be looked upon as hardly less than a necessity to the landscape-architect. It is the best possible basis on which he may improve both his knowledge and his taste. All of this lies beyond the very indispensable practical uses of the camera in photographing trees, buildings, gardens and all the other concrete materials with which he has to deal.

You Push the Button

H. W. CORRELL

THE song of the lawn-mower in the land is not the only manifestation announcing the advent of the summer-season, for, with the bursting of the buds, the click of the shutter is heard as the "you-push-the-button—we-do-the-rest" snapshooters break forth from their winter's hibernation and begin to waste films that should be devoted to higher purposes.

As summer and the vacation season draw near, I begin to look forward with great apprehension to the usual lot of snapshot prints that will be thrust upon my defenseless vision by beauty-blind friends who, I know, will ask na'vely, "Isn't that a peach?" Truth to tell, most of the prints I have in mind might just as well be called peaches as pictures. I speak of these persons as "friends"; but tell me truly, would a *friend* torture one by expecting praise for the average vacation-picture? I should say not!

Why is it that most camera-owners go forth to photograph without having the least idea of what subject to choose, and why? There seems to be no good reason; for all the manufacturers issue numerous booklets of instruction; and, then, there are the photographic magazines. However, who is so blind as those who will not see? I suppose I should console myself with the reflection that I do not have to pay for the wasted films. And besides, some one makes money out of the proposition, so what's the odds?

When one comes to think of it, isn't it amazing how many thousands of rolls and packs of films are virtually thrown away each summer? Sunday after Sunday, all summer long, trainloads of people leave the cities for outings at the various resorts. About one-fourth of them carry some kind of camera or other—large, small, or indifferent. Most of them begin to photograph wildly as soon as they get off the train. In fact, I have seen people try to "shoot" from a rapidly-moving train! Oh, well! They say there is one born every minute!

Last summer, I was wandering through an amusement-park when I came upon one of those familiar groups of Mabel, Horace, and Percy with their arms around each other and each wearing a grin a trifle more idiotic than the others, while George stood about three feet in front of them with a camera. Oh, my heart! Why go into details? The exposure was made, and George said (as I thought, thankfully), "There,

that fillum's done." *Done* is right, goodness knows! It is being *done* and will so continue to be *done* at the mountains and at the seashore.

Now, why do they do it? I expect that question is as hard to answer as the one about what becomes of the pins. I'll admit that some of the resulting prints are prized in after-years; but is the proportion great enough to repay one for the wasted films?

Are camera-owners beauty-blind? So many times, they appear to be trying to get rid of their films on the most unattractive views that they can find; when, by going a very short distance, in almost any direction, they could obtain a pleasing picture. Thousands and thousands of films are wasted every Sunday upon nothing but the rolling waves, yet, good pictures might be had by merely turning the camera to right or left to include a bit of shore, or an anchored boat, or the end of a dock.

The same thing occurs when the camera-owner has a day off for a hike in his home-community. Many beautiful pictures may be obtained in spots that are so familiar that they pass unnoticed. For instance, near my home is a recreation-park which, at one time, had much natural beauty. At present, however, there are glaring beds of geraniums and salvia where there should be goldenrod or wild asters softening the angles of the rocky formation. The "report of snapshoots" is heard here continuously from May first until cold weather; but the artistic results are nil.

Not half a block from the park, and along the same tiny stream that flows through it, are beautiful scenes galore. I have wandered up the stream hundreds of times, but only rarely have I seen any one there with a camera. And of those I have seen there with their cameras, most had a companion posing idealistically in the exact center of the view. Oh, shucks! You know the kind of pictures I mean.

Let's try to convert these erring brothers. I'll do my part. I have a great pile of photographic magazines which I have been prizing and hoarding for years. I'll get them out and give them to my inexperienced friends. Perhaps, that will help them to use their "fillums" to better advantage this summer. And ps-s-t! Watch your own camera so that you will set them a good example. I'll do the same. We know better, and perhaps the others don't. As the boys say, "Let's Go!"



Starlight—July 4, 1776

William Ludlum

The moon through the tree-tops is shining
And its beams cast a silvery glow
Enfolding in soft-gleaming radiance
The flag as it waves to and fro ;
But the moon is surpassed in its glory
By the stars — not the stars up above
That are so unresponsive, so distant —
The stars — in the flag that I love.



Circulating-Albums

ONE of several pleasant ways for amateurs of artistic ability to compare their work is by means of the circulating-album. This means of mutually helpful criticism has been in use these forty years, producing good results. The Editor remembers well the Postal Photographic Club, whose yearly album had a circuit of wide radius, and which included in its membership many admirable workers. Many similar clubs have been organised, yielding to its members a high degree of enjoyment and help. Several of these clubs of our acquaintance, not satisfied with the successive comments of its members, as the album passes from the hands of one member to those of the next on the list, find it advantageous to include the criticism of an eminent art-critic having adequate photographic knowledge. Here, a member may include more than one pictorial subject, although the initiator of a certain circulating-album that passed through the hands of the Editor, recently, had as many as five different prints. When a high degree of artistic and technical excellence is maintained, and a stimulus created for greater advancement, these circulating-albums are bound to produce good results.

A Motion-Picture Vaudeville

THAT motion-pictures have proved to be both a benefit and a detriment to civilisation is an admitted fact. But although the beneficent side interests the photographer more than the other, it has its abuses, which sometimes take the form of an adroitly planned and cleverly masked publicity-campaign presented as a travelogue or other entertainment.

Conspicuous among this class of entertainments is one, dignified by the name of travelog, which has been touring the country, secretly financed and managed by a western railroad-company for the ostensible purpose of advertising an American national park, to reach which travelers are obliged to use exclusively the line of this particular railroad. In order to ensure a large attendance, this travelog was announced as a lecture on a certain national park whose scenic beauty was to be illustrated by a certain method of Motion-Pictures in Natural-Colors. The ruse proved effective. Given before the

principal social, athletic and mountaineering clubs of our large cities, where admission is free to members and their friends, this travelog attracted large audiences. The Editor was present on one of the occasions when it was given in Boston, recently. It was a unique experience. With childlike faith and eager anticipation every one in the crowded hall took his seat. The first and unsuspecting victim was the obliging gentleman—a prominent college professor and famous alpinist—who had been invited to say a few words, from his own personal experience, on the American national parks, and also to introduce the speaker of the evening. He seemed to be at a loss to understand why he had been chosen for the honor and the privilege to introduce the speaker, but discharged his duty with alacrity and grace. The lecturer, without vouchsafing even a hint as to the actual nature of his mission, prefaced the pictorial display with a glowing verbal description of the national park, followed by the usual polite request that the lights be extinguished. This unnecessary and disturbing break in the course of the lecture is now omitted or camouflaged by considerate lecturers.

The first subject flashed upon the screen was a colored lantern-slide of the American flag associated with the timely and patriotic slogan, "See America First!" It brought down the house. This judicious introduction was followed by a number of projected stock-slides—plain and colored, with titles plainly lettered at the bottom—showing scenery, camps, lakes, cliffs, and native birds, each alternating with a carefully prepared picture of an hotel with special reference to its appeal to tourists. Then came the treat *par excellence*—a short motion-picture film in natural colors of a mountain in the park with a hotel in the foreground and some human interest. The film had been run through the projection-machine so frequently, on its long advertising-tour across the continent, that the colors had sadly deteriorated, and the usual, well-known indications of excessive use were painfully apparent. Moreover, there was incessant color-fringing and the definition was uniformly woolly and indistinct—perhaps, unavoidable defects of this particular cinematographic method. Not only was the result extremely inartistic, but the few remaining colors

were unnatural, while the effect upon the eyes of the spectators was exceedingly trying. But, this is only the opinion of the Editor; he may be wrong. There are such things as optical illusions. To atone for this annoying feature of the travelog or, possibly, to afford a pleasant change, members of a local tribe of Indians were shown in the act of illustrating the favorite Indian pastime of stealing horses. This film, mercifully devoid of "natural colors," might have yielded a greater degree of enjoyment had the participants been less perfunctory, sluggish and self-conscious. No effort of the imagination, however, enabled the spectator to connect this histrionic act with the scenic beauty of the locality under consideration. A still picture of a large, tethered wild-cat—designated by the lecturer as a mountain-lion—confronted by a timid fawn, both controlled by their local owners, proved another interesting diversion.

Shortly afterwards came another motion-picture reel in alleged natural colors, depicting local Indians in some of their characteristic dances. Fortunately, this agony was soon over and succeeded by a fairly good film of an enormous glacier declared to be several thousand years old. A pleasing open-air portrait of a popular novelist—a one-time visitor to this national park—and then another reel in natural colors (no better than those which had preceded it) varied the program. Peculiarly interesting was a wonderfully clear, close-up still picture of two mountain-sheep locking horns in deadly combat. Knowing how shy these animals are, and how exceedingly difficult to approach, many in the audience wondered how this remarkably successful photograph had been produced. A nearby spectator, in the capacity of a photographic expert, suggested a greatly enlarged positive of a long-distance snapshot; but a well-known taxidermist hinted—but at this critical moment the lecturer explained that this extraordinary photograph was a snapshot that had been made with the aid of a powerful telephoto-lens. That settled it. To avoid any possible monotony in this really unique exhibition—certainly not to obliterate any unfavorable impression created by the fated color-films—the lecturer now presented an excellent reel in monochrome of several Indian chiefs in merry mood—expressions of mirth rarely manifested by members of a dying race. This diversion was succeeded by a cinematographic novelty. It consisted of a reel of an object covered by an opaque sheet of paper or darkened film, which, beginning at one corner, was being gradually peeled off in a continuous, narrow strip, revealing the face of a comely, smiling squaw. In order to put

the audience in a still more happy frame of mind, the resourceful entertainer introduced a treat of a totally different character—animated cartoons. Although, like the preceding humorous diversions, they did not suggest, in the least, the scenic grandeur of the national park, which the vast audience had come to see and to enjoy, these startling, erratic pen-and-ink sketches evoked uproarious laughter, and, together with other engrossing features, made up for the shortcomings of the entertainment, if, indeed, they did not annihilate the meager impressions the audience had derived of the majestic beauty of the national park. The closing picture—in keeping with the character of the travelog—was a large portrait of the agent—pardon—the lecturer in the attitude of bidding goodnight, with that affable gentleman, himself, and in plain sight of the audience standing beside the screen!

The Editor has seen travelogs (illustrated travel-talks) presented by such extensive travelers and master-lecturers as Elmhendorf and Newman, and such expert photographers as Gleason and Clatworthy, who presented their subjects in a convincing and impressive manner; but he never dreamed that it was possible for any one to deliver an illustrated lecture on so inspiring and attractive a subject as an American national park, which produced the very opposite effect from the one originally intended, viz.: to attract visitors. The Editor, himself, felt that, in consequence of the conglomerate mass of material presented and the inadequate and distorted impression given of the subject he had been invited to enjoy, he knew no more about this particular national park than before. Moreover, he was conscious that he had been imposed upon—lured by false pretenses, and that an evening which he could have spent to better advantage had been wasted. This disappointment must have been shared by the committee of the club that arranged this entertainment, unless, indeed, they were aware of its ostensible purpose, namely, to advertise a beautiful and comparatively little-visited American national park. In ordinary circumstances, such an object deserves to be commended and supported; but when the lecture is offered without compensation, and, above all, when its ultimate object is to promote a private enterprise, the case is quite different. Clubs and societies who take advantage of free lectures, and other entertainments, should assure themselves of their purpose and character before they commit themselves and run the risk of not only being imposed upon, but made innocently to aid a mercenary undertaking. Means that are fair, open, sincere, are the best by which to attain an object.



ADVANCED COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value \$10.00.
Second Prize: Value \$5.00.
Third Prize: Value \$2.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Prizes may be chosen by the winner, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, of artistic design, suitably engraved.



Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. **No more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Remember that subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.** Prints on rough or linen-finish surface and sepias are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. All prints should be mounted on stiff boards.

3. **Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data.**

4. **Each print entered must bear the maker's name and address, the title of the picture and name and month of competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for a 2-cent stamp. Be sure to state on the back of every print exactly for what competition it is intended.**

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, this does not prevent the photographer from disposing of other prints from such negatives after he shall have received official recognition.

6. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins; but in every case, prints should be protected by strong, stiff boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

7. Competitors who have won three first prizes within a twelve-month, become ineligible for two years thereafter. The too frequent capture of the first prize by one and the same competitor tends to discourage other participants and to make the competitions appear one-sided and monotonous.

Awards—Home-Scenes Closed April 30, 1921

First Prize: Kate Matthews.
Second Prize: George W. French.
Third Prize: Hannah G. Myrick.

Honorable Mention: Dr. George E. Blackham, J. E. Carson, George Warren Furbeck, G. W. Gould, Ralph D. Hartman, Leonard C. Lee, Jr., A. Palme, W. H. Pote, M. W. Reeves, Henry A. Stanley, Kenneth D. Smith.



Subjects for Competition—1921

"Winter-Sports." Closes January 31.
"Home-Portraits." Closes February 28.
"Copying Works of Art." Closes March 31.
(Paintings and Statuary.)
"Home-Scenes" (Interior). Closes April 30.
"Street-Scenes." Closes May 31.
"Summer-Sports." Closes June 30.
"Summer-Flowers." Closes July 31.
"Marines." Closes August 31.
"Outdoor-Genres." Closes September 30.
"Architectural Subjects." Closes October 31.
"Domestic Pets." Closes November 30.
"Indoor-Genres." Closes December 31.



Photo-Era Prize-Cup

In deference to the wishes of prize-winners, the Publisher will give them the choice of photographic supplies to the full amount of the First Prize (\$10.00), or a solid silver cup, of artistic and original design, suitably inscribed, as shown in the accompanying illustration.



"Shore-Scenes" Changed to "Marines"

WE have received a number of requests from subscribers and contributors to our competitions to change the competition "Shore-Scenes" to "Marines." Inasmuch as the general subject of "Marines" may be said to include "Shore-Scenes," we have decided to make the change and ask contributors to bear this in mind when sending pictures for the August, 1921, competition. We refer our readers to the department for Advanced Workers, in this issue, for further details.



"I HAVE TO GO TO BED BY DAY"

KATE MATTHEWS

FIRST PRIZE—HOME-SCENES

Photographing Blue Prints

THIS work looks so easy, for a "blueprint" is generally a dark blue, or fairly dark, but in reality it is a difficult proposition to any one unaccustomed to the work. In practice there is only one plate that can be depended upon for emulsion to produce a good-printing negative. The one plate is a backed process-panchromatic; this with a red filter will give the operator a fine black and white negative which may be used successfully to obtain the required results.

These plates must be manipulated in total darkness unless the photographer possesses a safelight; but for occasional work this expense can be overcome. But be quite sure that there is no white or actinic light creeping in anywhere; and after the plate has been safely housed in the plateholder, wrap the box containing the remaining plates in the usual black paper, tying a string around the same.

The plate being now safe in the plateholder, proceed to focus to scale with the red gelatine-filter fixed in position behind the lens with one or two drawing-pins. Some operators unscrew the front lens and fix the filter in front of the diaphragm or stop, but it is best not to interfere with the lens, half a turn one way or the other may affect the definition. Others adopt a means of fixing the filter in the front, which is useful if you have glass-filters; but modern "flats," as they are termed, are expensive. A 3-inch square gelatine-filter is a convenient size.

The "blue print" is most conveniently photographed if placed in a printing-frame with a glass in front. This is easily shifted, whereas if drawing-pins are used it means taking out ten or twelve, or even more, if the "blue print" is a large one and an alteration needful.

Finally, attend to the carbons, if you have not done so, as they may be required to run for fifteen minutes.



THE DAILY NEWS

GEORGE W. FRENCH

SECOND PRIZE—HOME-SCENES

The larger the reduction the smaller or less the exposure, so that as little as five minutes may suffice.

It is now presumed you have focused through the red filter, inserted the plateholder, seen to the lamps; now cap the lens and insert diaphragm F/45, but if the reduction is very considerable, let us say a 24 x 20 or 20 x 16 print to postcard or $3\frac{1}{4} \times 4\frac{1}{4}$, then F/64 is best. On the other hand, if you have to make a negative enlargement or only a reproduction the same size F/32 is correct, for that at the same size is equal to F/64 so far as aperture to camera-extension is concerned.

Be sure to see that the light of the lamps is not reflected back into the camera from the printing-frame. Take out the focusing-screen, cover head with a dark cloth, and then look first one side and then the other. If the light shines in your eyes you may know it will spoil the negative. After the lights—do this with the open lens—re-insert the stop, and place the cap on the lens. Then insert the plateholder, draw the slide and expose, and take a seat to avoid vibration. Have pencil and paper, and put down the exposure so that if a second plate has to be used there will be no doubt in your mind as to how long you gave the first. Full exposure with at least F/32—but F/45 will generally be found better—full development, ample fixing, the usual washing and drying, a good, glossy, contrasty paper, and you can send the prints home with the knowledge that you can charge a good price.

The exposure may be anything from three to fifteen

minutes. Now, taking the plateholder into the developing-room, have something ready to cover over the tray, as few darkrooms are absolutely light-proof, and fasten the door. Insert plate in developer and cover it over, having previously taken the time. Then count the seconds, and, when five minutes is up, check yourself by the watch. It is well to let the plate develop for at least two minutes motionless, and then rock the plate well to prevent any of the backing from settling on it. At the end of five minutes, turn on the red or green light, and just glance at the plate. Most likely, you will give it another sixty seconds, then turn on the water into the developing-tray, and give the plate a good rinsing, take out, place in fixing-bath, but do not leave the room unless you can gain access to the outer world without admitting actinic or white light, for even in the hypo these panchromatic plates are remarkably sensitive; it is very desirable that a good fixing be given; fifteen minutes is none too long. I remember a case in which a plate seemed longer than usual in fixing. I turned on the light behind the yellow lantern. I held a 24 x 20 plate to the light, but a patch in the corner was not fixed; it caught the light, although perhaps only exposed to it for ten seconds. After washing and drying, that corner was found the next morning to have a dense patch which caused a lot of trouble, all of which might have been avoided by five minutes more in the hypo.

A. C., in *The British Journal*.



THE CAMP IN THE WOODS

HANNAH G. MYRICK, M.D.

THIRD PRIZE—HOME-SCENES

The Relation Between Shutter-Speed and Lens-Stop

THE stops with which photographic lenses are fitted regulate the amount of light that passes through the lens. A large stop passes more light than a small one does, just as a large window allows more light to enter a room than a small window does.

According to a writer in *Kodakery*, the exposure that is needed to obtain a correctly timed negative depends on the intensity or brilliancy of the light that reaches the film. Since the size of the stop affects the volume of the light that passes through the lens it is evident that the smaller the stop the longer must be the exposure.

There are two widely used systems of marking lens-stops: The U. S. (Uniform System) is ordinarily used on rectilinear lenses, and its markings are based on the relation between the *area* of the stop and the focal length of the lens, while the F-system is in virtually universal use on anastigmat lenses, and its markings are based on the relation between the *diameter* of the stop-opening and the focal length of the lens.

Different numerals are used for expressing the relative values of the stops in these two systems; but in both systems all stops that bear a *higher* number than U. S. $\frac{1}{8}$ or F/8 admit just half as much light as the next lower-numbered stop. This means that for all higher-numbered stops the exposure must be doubled when the stop-indicator is moved from any one stop-number to the next higher number, and must be halved when the indicator is moved from any stop-number to the next lower number. To illustrate: should the correct exposure be 1/25 of a second with stop 16 it would be 1/50 of a second with stop U. S. 8 or F/11, and 1/12 of a second with stop U. S. 32 or F 22.

The numerals used for marking the stops in the U. S. and F-systems are listed in the first two columns of the accompanying table.

In the third column the values of these stops are compared with the exposure value of F/8 (U. S. $\frac{1}{8}$), which is the largest stop on rectilinear lenses.

The last column translates these values into actual exposure-fractions, taking 1/25 of a second with stop 16—the usual exposure for ordinary landscape subjects in sunlight—as a standard.

Lens-stops that are marked $\frac{1}{5}$, 5.6, 6.3 and 7.7 are used only on anastigmats.

No photographic shutter has all the speed-markings listed in the last column; but the approximately correct exposure can always be given by using the stop that the available shutter-speed calls for.

COMPARATIVE STOP-VALUES

F	U. S.	Relative Exposure	Comparative Exposures
$\frac{1}{5}$	1.25	.3	1/330
5.6	2	.5	1/200
6.3	2.5	.6	1/160
7.7	3.7	.9	1/110
8	4	1	1/100
11	8	2	1/50
16	16	4	1/25
22	32	8	1/12
32	64	16	1/6
45	128	32	1/3

The importance of an accurate and thorough grasp of the relation between shutter-speeds and lens-stops is of practical value to every amateur and professional photographer.



SUBJECT FOR NEXT COMPETITION ADVANCED WORKERS



"A SOUTHEAST STORM ON MAINE COAST"

W. T. STARR

EXAMPLE OF INTERPRETATION

Advanced Competition—Marines Closes August 31, 1921

It will be remembered that according to announcements already made, we changed this competition from Shore-Scenes to Marines. As some of our subscribers and contributors reminded us, "the general subject of Marines may be said to include Shore-Scenes." Although this may be true, in a sense, we could hardly accept a vista along a small trout-stream as a marine picture. Nevertheless, there are many marine subjects to be found on or near our large inland lakes. It should not be assumed that a marine picture is confined entirely to subject-material to be found along the Atlantic or Pacific seaboards. However, in this competition the worker should seek his subjects near large bodies of water that will lend themselves to marines rather than to shore-scenes.

It matters little whether the camerist selects the subject for this competition as he wanders along the shore of a lake, or whether the shores of a mighty ocean

furnish the requisite pictorial material. The important point to remember is that it must be a marine; and, unless it is a convincing one, the jury will not view it with favor. Technically, the present competition is filled with interest. The matter of correct exposure and attractive lighting offers the worker as much opportunity for thought as does the artistic composition of the picture. Also, the use of a suitable ray-filter may engage the contestant's attention to advantage. An opportunity is given to those workers who are eager to make telephotographs of distant ships, lighthouses, points of land or other subjects that are too far away to be photographed with the usual hand-camera equipment. In short, we have a competition that will be a fair test of the camerist's photographic ability in a slightly different direction than usual.

It is well to remember that in making marines or shore-scenes it is often better to emphasise one striking object such as an old pine-tree, clump of reeds or ledge of rocks. It is a natural tendency for the worker to be eager to include all that he possibly can of a beauti-

fully curving shore or broad expanse of bay; but, unfortunately, the complete picture is apt to be disappointing. The curving shore which seemed so attractive to the eye is very apt to be reduced to such small proportions, that the beauty of the scene is lost entirely. I mention this point because I have made this very mistake many times, and have yet to obtain a satisfactory result. Of course, if the photographer is equipped with a large view-camera and can use the single element of a symmetrical lens, he may obtain a picture commensurate with the exertions involved in carrying such an outfit about. However, most camerists, to-day, do not use an outfit much larger than the popular postcard-size; and these cameras are not usually fitted with symmetrical lenses. Neither have such cameras the requisite bellows-extension. In most cases, it will be well for the average camerist to confine his activities to a subject that may be photographed to advantage with the particular equipment that he possesses.

"A Sou'east Storm on the Maine Coast," by W. T. Starr, is an excellent example of a good marine. The artistic strength of this picture lies in its simplicity. As I have said so many times, the greatest masterpieces in art, literature, music and photography are the simplest. A boat pulled up on the shore of a lake has great pictorial possibilities. The activities of the amateur or professional fisherman, yachtsman, and canoeist, can be utilised with profit. Then, there are the campers and the summer-vacationists to turn to for good material that is filled with action and is often spectacular. It is for the individual worker to decide what part of the varied material at his disposal he will select. To a certain extent, he will be governed by his environment; and, often, he may be obliged to make the best of a subject that he would not choose if another, more to his liking, were available. However, there are virtually no marines that do not possess some pictorial beauty, if the camerist has the experience to detect it. The remarkably spectacular effects obtained by H. C. Mann with only a sand-dune and a few clouds to work with, constitute a case in point.

It is of distinct advantage, at times, to be able to sail slowly along the shores of a large river, lake or along the sea-coast with one's eye and mind keenly alert to seize upon a pictorial subject that may present itself at any moment. In my own experience, I know that such a procedure often results in obtaining an effect otherwise not to be had. I recall one incident that will help to make clear my point. On a certain large lake there was a point of land and on the end of the point stood an old, gnarled scrub-pine. On each side of it were tremendous boulders and ledges of rock. If one walked out to this pine-tree, there was little of pictorial beauty to be seen. If one rowed out to one side of the point, the composition still fell short of being satisfactory. However, if one rounded the point and approached the old tree from the other side, there was a picture of striking beauty. It is for the intelligent camerist to make haste slowly, and to make sure that there is not a better view-point to be obtained than the one first selected.

Perhaps, some of the best examples of the shore-scene and marine picture, as it may be used by the pictorialist, are found among the masterpieces by Bertrand H. Wentworth. Those camerists who were privileged to see the exhibition of Mr. Wentworth's pictures held at the gallery of the Society of Arts and Crafts, Boston, were given convincing proof of the adaptability of such subject-material to the highest artistic requirements. With masterly skill, Mr. Went-

worth often photographed his subjects under conditions of weather which were most unpromising technically. The rugged coast-line of Maine offers countless opportunities to the camerist who can appreciate the beauty and the dramatic appeal of nature. As I have said before on this page, if the photographer himself is not in sympathy with or inspired by the subject before him, it will be difficult for him to awaken sympathetic interest in the beholder of the finished picture. In a sense, the camerist is like a musician. We have all heard the technically perfect playing of a pianist or a violin-soloist; and yet, we have come away dissatisfied. On another occasion, we have heard the very same compositions played by others and we have been stirred deeply and have come away satisfied and exhilarated by the music. In the former case, we have cold, hard technique—perfect, to be sure, but without a heart. In the latter case the technique may not be faultless; but there is life, love and soul in the playing that sweeps all before it and we acclaim the musician to be a master. So it is, in a great measure, with the amateur or professional photographer. Whatever of the deeper, finer emotions of the heart he puts into his picture, he will usually find reflected in the mind and heart of the beholder.

With a few exceptions, the present-day well-equipped hand-camera will meet virtually all conditions of wind and weather. Even a good rectilinear lens will yield remarkably beautiful effects, because of the actinic value of the light across the water. Those who enjoy telephotography will require the use of a stout tripod. A reliable exposure-meter should be used, for the light across water is very deceptive even to the veteran-photographer.

It may not be amiss to caution the camerist to take every precaution to keep his outfit protected from the effects of dampness—especially the salt air from the ocean. There are few cameras that are made to withstand the effects of dampness and, unless care is taken, the leather covering, bellows, shutter and even the lens may suffer permanent injury. What I have said applies as truly to plates, films, paper and chemicals. Those workers who expect to spend considerable time on or near the water should provide themselves with one or more large tin-boxes that have an air-tight cover. Then all sensitised material should be kept in these boxes until required. A stout, leather carrying-case for the camera is a positive necessity for protection from the weather and from unexpected knocks. The more time and money the camerist has put into his photographic venture, the more care he should take that he receives an ample return on his investment. This is good business, and it is good photography.

It would seem that this competition is especially timely and that there should be a ready response from our many subscribers and friends. From many letters that we receive, we learn of the tremendous amount of benefit that these competitions have been to amateur and also to professional photographers. Moreover, we know that they are followed eagerly by many readers in all parts of the world. For this reason, it is of great importance that each contestant read the rules carefully and that he bear in mind the suggestions here advanced. There is no doubt that this year's competitions should exceed in interest and in the number of contestants that of any preceding year.

Let it be remembered that we are all working together to make photography an art and a science of which we can be proud, and to which we can give our very best.

A. H. B.



BEGINNERS' COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U. S. A.

Prizes

First Prize: Value, \$2.50.

Second Prize: Value, \$1.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Subject for each contest is "*Miscellaneous*"; but original themes are preferred.

Prizes, chosen by the winner, will be awarded in photographic materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

Rules

1. This competition is open only to beginners of not more than *two* years' practical camera-activity, and whose work submitted here, is *without any practical help from friend or professional expert*. A signed statement to this effect should accompany the data.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints from $2\frac{1}{4} \times 3\frac{1}{4}$ to and including $3\frac{1}{4} \times 5\frac{1}{2}$ inches, and enlargements up to and including 8×10 inches.

4. Prints representing *no more than two different subjects*, for any one competition, and printed in any medium except blue-print, may be entered. They should be simply and tastefully mounted. ***Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.*** Prints on rough or linen-finish surface paper and sepias are not suitable for reproduction, and should be accompanied by smooth prints that have the same gradations and detail.

5. *Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data. Criticism at request.*

6. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, he may dispose of other prints from such negatives after he shall have received official recognition.

7. Each print entered must bear the maker's name, address, instructions, the title of the picture and the name and month of the competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type, and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for 2-cent stamp. ***Be sure to state on the back of every print for what contest it is intended.***

8. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins, but in every case, prints should be protected by strong, stiff boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

Beginners' Competition

Closed April 30, 1921

First Prize: Ellen C. Hildebrand.

Second Prize: None awarded.

Honorable Mention: Anton Berest, Martin J. Burelbach, Harry Chamberlain, Carl S. Davis, John J. Griffiths, George F. Hogan, Frank W. Snyder, C. H. True.

The Beginner in the Country

(Reprinted by Request.)

(A WELL-KNOWN subscriber and superintendent of a number of large estates has requested that we reprint in this department the article which appeared one year ago. This subscriber is a lover of nature and of photography; but he has had occasion, a number of times, to regret the thoughtlessness of some camerists; and he feels that by repeating this article we shall render a service to photography and help owners and superintendents of beautiful estates, parks and gardens to preserve them undamaged and free of photographic litter.—Editor.)

"In this article I am going to use the term 'country' in the sense which includes the seashore, farming-communities, lakes and mountains. In short, if the beginner is not in the city, he is somewhere in the country; and, in all probability, he intends to make the most of his photographic opportunities. Those who have read these little articles, from month to month, are aware of the importance I attach to the mastery of one's equipment and the need of determination to get the most out of photography. Another step is so to conduct one's self as an amateur photographer that disinterested persons will be led to admire and respect the user of a camera. By this statement I do not mean to imply that camerists, as a body, are looked down upon by the general public; but I do mean that the goodwill of the public is a great asset to amateur and professional photographers. Perhaps, I can make my point clearer by citing an incident that came under my observation.

In a beautiful New England town, there was a gentleman of wealth and culture who loved the flowers, birds and animals. He bought a large tract of land and built a magnificent estate. After several years of effort, and the expenditure of thousands of dollars, he obtained his heart's desire in the form of a veritable fairyland in which flowers, birds and animals were guarded zealously from harm. Many friends came to visit this gentleman, and all agreed that it was too beautiful a spot to be barred to the public which ought to be permitted to enjoy it with the owner. After repeated requests, the owner consented to open the grounds to the public, on certain days. All went well for a time, until the gardener noticed that certain rare flowers had been picked and that carefully swept walks had been disfigured by paper-cartons that had contained roll-films, and by paper-tabs from film-packs. The owner regretted these evidences of thoughtlessness, but still kept his grounds open. As a gentle reminder, he had several signs set up which requested the co-operation of the public to keep his beautiful estate free



THE TEAPOT

ELLEN G. HILDEBRAND

FIRST PRIZE—BEGINNERS' COMPETITION

of defacement and damage. No more flowers were picked, nor were there any further signs of damage; but the paper-cartons, tabs and tin-foil still littered the walks and drives—conclusive proof that amateur and professional photographers failed to appreciate the fitness of things. The result of this continued annoyance was that the owner decided to close his grounds to the public, and that his opinion of photographers bordered on disgust. Needless to say, every photographer that visited these grounds did not throw cartons and paper about; but in this case—as in hundreds of similar ones—the innocent have to suffer for the guilty.

It is my belief that no regular reader or subscriber of PHOTO-EPA MAGAZINE would intentionally mar the beauty of any garden or park; and I doubt very much that photographers, generally, are given to such thoughtlessness. However, facts are facts, and the beginner will do well to help create a favorable impression wherever he goes by taking pains to avoid any act that may reflect on the good name of photographers.

A visit to places of historic or scenic interest will bear out my contention that greater care should be used to avoid littering up the immediate vicinity with evidences of the presence of the camerists. A short time ago, I stood before a beautiful waterfall, and as my mind and heart drank in the grandeur of the descending, foam-flecked water amid its setting of towering cliffs, my eyes chanced to fall upon the immediate foreground. There—literally in heaps—lay cartons, tabs, tin-foil and other evidences of the thoughtlessness of some camerists. It is no exaggeration to say that this sight spoiled an otherwise perfect scene of natural beauty. It would require so little effort to throw cartons and paper away at some place that would be inconspicuous or, better still, carry them home.

Another point I am led to mention, because of actual experience, is the one of personal relations with persons who are strangers, and who are not especially interested in photography. I do not blame any beginner for feeling enthusiastic about photography; but it does not follow that the stranger that he meets will share his enthusiasm. Every camerist will attain his ends to better advantage if he respects the wishes of others and by quiet diplomacy achieves the results he is after. This suggestion applies to cases where it is necessary to obtain permission to make pictures. Wherever a photographer makes photography respected, he is making it that much easier for other camerists to follow and make good. The owner of a Brownie is just as much a photographer as he who uses an expensive reflecting-camera. My point is that any person that carries a camera is entitled to every courtesy because he is a *photographer*. To attain this desirable end, each beginner must do his share and do it with a will.

During a vacation the beginner will have many opportunities to make or break the opinion that strangers may have with regard to photography. No matter how courteous he may be, or how careful, with regard to throwing cartons about; if he cannot make a good picture, he has lost another opportunity to leave a good impression of photography. Unless a beginner is equipped technically and artistically to make a good snapshot, he should not go through formalities, or inconvenience others, to get permission to make pictures.

Let every beginner as he leaves for the seashore, lakes or mountains make a resolution to uphold the ethics of the practice of photography. In so doing, he will help build up the name of photography among those who know little about it, and he will also find that he will enjoy camera-work in full measure. This is worth while; isn't it?

A. H. B.

Inaccuracies About the Pilgrims

MANY of our readers who are to visit Plymouth, Massachusetts, this summer, to attend the pageant that will be given in connection with the tercentenary of the Landing of the Pilgrims, will have read the history of that event in various books written on that subject. Unfortunately, not all the writers have made an effort to be accurate, and for the benefit of persons that desire to be well informed on the subject of the Pilgrims, I give herewith a number of interesting extracts from an article written by Frank H. Kasson for the *Boston Transcript*, in which he corrects a number of wrong impressions regarding that group of stout-hearted settlers of Plymouth, three hundred years ago. W. A. F.

The poet Longfellow has set an example of inaccuracy in dealing with our Pilgrim ancestors, which has been widely followed. His charming poem, "The Courtship of Myles Standish," has been read by millions of his countrymen and doubtless accepted by great numbers as gospel truth. Yet it has no historical basis. There is not a scintilla of evidence that the fearless captain, who was small of stature and red-headed, but every inch a soldier, had any desire to win the affections of Priscilla Mullins. He was a very busy man during the first years at Plymouth. And, but for his wisdom, skill and heroic actions, there is little doubt that they would have all been murdered by wild savages, who were not wholly restrained by Massasoit. It seems too bad that so brave and unselfish a man as Standish was, should now be paraded before his descendants as a rejected suitor. He and they deserve a better fate.

The poet is no more accurate in dealing with him than he is in describing the marriage of John Alden and Priscilla. What a pretty bit of fiction it was to place Priscilla on a "milk-white steer," when there was not a cow, nor a steer in all New England! And, by the way, John Alden was far too wise a man to have led his bride even one mile away through the woods, at the time they were married, unless armed men had attended them.

But many are now writing about the Pilgrims, careless or unmindful of facts which could be easily obtained. Frank R. Shipman, in his pageant, "The Pilgrim Way to Freedom," offers a scene on Cole's Hill, "the first week in March, 1621," which is quite prettily put, but which is about as full of misstatements as it can well hold. He says: "A light snow covers the ground." What basis is there for that statement? Of course, some winters, there has been snow, at Plymouth, early in March. But this was a remarkably mild winter, which was a blessing to those starving, dying settlers. The records show rain on quite a number of days. Thus, Dec. 21, "stormy and wet"; Dec. 22, "still storming"; Dec. 26, "foul weather"; Dec. 29, "rainy"; Jan. 12, "began to rain about noon"; Jan. 15, "it rained much all day"; Jan. 19, "at noon it rained"; Jan. 29-31, "frosty with sleet"; Feb. 4, "wet and windy"; Feb. 16, "frost"; March 3, "towards noone warm and fayre weather; the birds sang in the woods most pleasantly"; then at one o'clock claps of thunder and at 2 p.m. "it rained very sadly till midnight"; March 7, "this day some garden seeds were sown." These dates are all old style, and taken from that very informing book, "Mourt's Relation." As a matter of fact, I can find no record of any snowfall, after they reached Plymouth, that winter. Would they not have been more likely to chronicle a snowstorm than all these rain storms? Also, Cole's Hill was very near salt water for snow to remain on the ground, anyway.

Priscilla sits "on a fallen log," and Myles Standish

"on another log." Do you think there were logs about Cole's Hill at that time? All that side hill was cleared ground, as well as eight acres on Burial Hill. Pictures of the early cabins along what they called "the street," since known as Leyden Street, do not bear out that idea. Had there been any loose logs as near as Cole's Hill, how gladly would the Pilgrims have used them for fuel or in their cabins. Do you realise that every log for each of their cabins and every stick of firewood had to be carried in the arms or on the backs of men over forty rods? This "Mourt's Relation" says: "Our greatest labour will be fetching of our wood, which is halfe a quarter of an English myle, but there is enough so farre off." They had no horses or mules or oxen to do the heavy work. Everything had to be done by men. And by February only about eight men were left to cut firewood, to lug it to the cabins, to build fires, to do the cooking, to wash the clothing, to care for the sick, and to bury the dead. It was no small work to dig graves for all who died. I respectfully submit that Standish was too busy and active a man to sit idly on a log, and let his hand close over Priscilla's whose father had died but two weeks before (Feb. 21), and the Captain's wife, Rose Standish, on Jan. 29 (Old Style). This idea is wholly due to Longfellow's poem. And, remember, Indians had been seen in considerable numbers, but the Pilgrims could not get speech with them. It was March 22 before Massasoit came to make a treaty of peace with Governor Carver. As the men were few, the Pilgrim women and girls were then in mortal fear of the Indians. So I neither think that Priscilla would have gone to Cole's Hill alone that first week of March, nor that Standish would have left any logs there on the ground behind which skulking savages might conceal themselves.



Photographic Books and Your Vacation

ALTHOUGH the vacation-days are set aside for the sole purpose to relax and do as one pleases; nevertheless, there are those who obtain rest and diversion through doing something unlike the regular duties of business. To some, a photographic text-book may appear to be uninteresting reading, especially in hot weather; but we are sure that many readers of PHOTO-ERA MAGAZINE will be eager to make the most of the vacation-leisure to learn more about the fascinating subject of photography.

The vacation-days are at hand. Those of our readers who are planning an early departure for the sea-shore or the mountains should give a moment's thought to the acquisition of one standard photographic text-book. To meet this demand we have obtained a stock of standard books among which we have the following, ready for immediate delivery.

Topsy and Turvy (with original animal-photo's) by Carine and Will Cadby, \$1.60; Photographs for the Year 1920, paper, \$2.50, cloth, \$3.50; The Commercial Photographer by L. G. Rose, \$4.00; Photography and Fine Art by Henry Turner Bailey, \$2.50; The Dictionary of Photography by E. J. Wall, F.R.P.S., \$5.00; Photography—Its Principles and Applications by Alfred Watkins, \$4.00; Professional Photography (two volumes) by C. H. Hewitt, \$1.75; Photography Made Easy by R. Child Bayley, \$1.50.

To ensure prompt and satisfactory service, please include cheque, money order, or express order with your letter and 15c. extra for postage to all points outside of New England. Address all orders direct to PHOTO-ERA MAGAZINE, Wolfeboro, New Hampshire, U.S.A.



THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



The Nature of Light

WITH the aid of charts, pictures, projections and light-rays, Prof. E. L. Chaffee gave an interesting lecture on visible and invisible light, at the Jefferson Physical Laboratory, Harvard University, May 25.

Professor Chaffee demonstrated how easy it is to camouflage by the manipulation of colors, since it is in the nature of colors to reflect certain color-rays and conceal others. In one of these demonstrations, he focused a ray of light upon a large pasteboard and the letters "H. U." were seen on the board, and when he filtered the ray through another plate which changed the color, the "H. U." vanished and the letters "Phy. Lab." appeared in their place. Both these groups of letters had been painted on the pasteboard; but they could be concealed or made visible by the use of the light. Similarly, one stream of light gave the impression that the paper suspended in the air was pure white; but when another ray was focused on it, the picture of a horse that had been painted on the paper became visible, whereas still another light gave visibility only to the paint that outlined the skeleton of the horse. These principles were applied by the camouflage-divisions in the World War to conceal the identity of airplanes, searchlights subduing some of the colors and giving reality to other designs that otherwise were invisible.

Light, as defined by the speaker, is an electromagnetic vibration. It is a wave. It is exactly the same nature as the X-ray, or the heat-wave, or the wireless-wave. The X-ray is the shortest; the ultra violet wave is a little longer; then comes the light-wave, beyond which the eye cannot see. If the eye could see longer, it could see the heat-wave and might also see the wireless-wave, which is of indefinite length. Or to put it in other words, for clearness, the lecturer said that if the light-waves were extended, they would become heat-waves, and it is the length of the light-waves that determines the colors.

When people decided to wear dark clothes in the winter and white clothes in the summer, they applied to the science of dress a principle which scientists prove to be quite logical, and Professor Chaffee gave a demonstration of it. Intense heat was developed in an apparatus. When a piece of black paper was placed in front of the machine, it absorbed the heat so that it showed through in a deep red; but when a white paper was placed in front, there was no absorption and no display of heat.

Electric light projected through a prism showed all the colors of the rainbow on the sheet. A green glass cut out the violet and the red, whereas a purple glass let through the red and the violet only. Various colored objects, such as yarn, wool and minerals, were placed in the spectrum, and it developed that each reflected its own real color only in its own spectrum, showing black in all the others. How the artist may learn how to mix colors, which term is a misnomer, was also demonstrated by the mixing of various color-lights and producing new colors.

Ultra-violet light does not come to earth from the sun in adequate quantities, though nature needs these

rays, so it has been discovered that nature makes use of the chlorophyll, which is the green coloring-matter in plants, to accomplish with red light what otherwise would be produced by the ultra violet.

Problems of this type were demonstrated and discussed for more than an hour, bringing out many principles that were new and interesting to the audience.

Duration of the Latent Image

ALL the theories hitherto advanced as to the nature of the latent image, formed by the action of light on the responsive sensitive film, are not convincing, but the investigations have presented facts which tend to the conclusion that the change produced is of a physical character, that the impact of the light sets up a molecular disturbance and dissociation is effected, and a new condition of equilibrium of the particles produced, states an investigator in the *Photographic Journal*.

The phenomenon is akin to what takes place in phosphorescent bodies; that is, eventually the impulse dies down, and the film of silver emulsion, like the phosphorising body, returns to the normal state it had before illumination. This phenomenon would tend, therefore, to support the view of the ultimate fading of the latent image. But investigators, notably LeBon, have shown that more than eighteen months after exposure a gelatine plate may be made responsive to stimulation; that is, the excited molecules may be lashed up, as it were, from their tardiness and show that they are only quiescent.

In the collodion process, where the image is superficial in contradistinction to the image in gelatine matrix, disappearance of the impression takes place in comparatively short time after exposure of the plate, so that there is a limit to interval of its development, but with gelatine films it cannot be asserted positively that the latent image is effaced by time. LeBon's experiments would seem to substantiate the possibility at least that even a momentary impulse of light persists for a considerable period of time. The ultimate fading may be attributable to the impossibility of preserving the integrity of the original impact from extraneous or associate film-influence militating against its continuance.

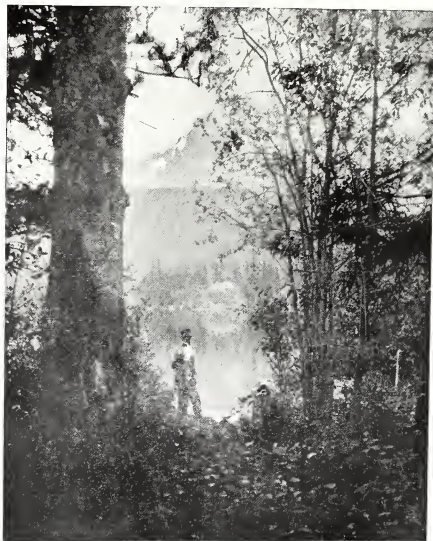
The experience which has been reported relative to development of exposures made six months or more previously has been that the character of the image evolved by development, as compared with that upon freshly exposed plates of the same emulsion handled in the identical way, is in the direction of softer negatives than films developed a few hours after exposure.

We cannot positively say, therefore, that the latent image ultimately disappears, but neither can we affirm that it is not impossible by action of some force to call again to energetic action the retarded dissociation.

Time may have some effect upon the gelatine lock-up of the molecules. Gelatine perforce must get harder and more horny by influence of age; and some means might be devised to unlock the prison and give the cellmate freedom to act once more—to the kind impulse of extraneous assistance.



OUR CONTRIBUTING CRITICS



YOUR CRITICISM IS INVITED

Whoever sends the best criticism (not over 150 words) before the twentieth of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

This picture has so many good points that it is not open to very drastic criticism. Technically, it is about as perfect as could be made. The values in sky, land and water are all fairly good and the clouds of just the right strength to complement the landscape. From the viewpoint of composition, there are some improvements to be made. The space from top to bottom is divided into approximately equal parts, by the skyline and distant shore-line. This is not easily remedied. It is somewhat relieved, however, by the trees cutting across, a good feature in itself which should have been used to greater advantage by the use of a larger stop of careful focusing to give less sharpness to the distant shore and mountains. As a matter of fact,

the skyline is as sharp as the foreground and trees. This sacrifices all feeling of separation, or aerial perspective. Another help would have been more exposure which would tend to lighten the belt of trees on the shore-line and modify the cutting-effect previously mentioned. All of this criticism is intended to improve the pictorial qualities of the picture as it stands. Not knowing the surroundings, one cannot speak with certainty; but it would seem probable that a better composition might have been obtained by using the camera horizontally if the width of the plate or film would include sufficient amount of sky and foreground.

E. H. WASHBURN.

AUSTERE grandeur! The very shape of the print is in complete harmony with the long, straight lines of the composition. The tone-balance is achieved in black by the single trees in the foreground and the line of clustered trees in the near background. Likewise is the rifted snow in the mountains balanced by the clouds



THE PICTURE CRITICISED THIS MONTH

further up. Finally, the mid-tones of the water and the mountains perfect the color-balance.

It is regrettable that the one bare tree-trunk, just left of the center, was not done away with, leaving the surface of the water unmarred; and that the tree at the extreme right was not included in its entirety, thus doing away with the impression that its roots are buried somewhere in blank space. The bright white spots in the lower-right corner form another disturbing element.

Y. BILLY RUBIN.

It would be hyper-criticism to find fault with Mr. Dyer's stately picture in the Canadian Rockies, which is offered in the May issue for critical consideration; but as this department is conducted for the benefit of those who wish to improve their work and, as I take it, Mr. Dyer is quite willing that his picture should be criticised, I beg to offer the following suggestions. First, we must admire the dexterity and success with which the artist has screened, what I take the liberty to consider, real faults in the composition. Blot out, or imagine removed, the five trees in the foreground, including the two at the extreme right, and you will notice that the picture is composed of three distinct sections almost equal in size—namely, the sky, the mountains and the lake—relieved in a measure by the immediate foreground which is a fragment of the shore. Second, it would have been better had the artist made the tree, at the left, incline toward the right, rather than to the left. It would, perhaps, be too much to

expect the artist to have remedied this difficulty by means of a rope or a wire, and forcibly directed this slender tree towards the middle of the picture. Perhaps, he might have chosen a different standpoint and thus avoided this minor fault. The tone-values of the picture appear admirably truthful, the water being lower in tone than the sky, and the immediate foreground still lower in tone, thus giving a fair degree of balance to the picture. Had the sky been blank (bald-headed) the picture would not have been so successful as it is. The artist has nevertheless succeeded in giving a good idea of the grandeur of this locality, and deserves credit for his deep appreciation of the beauty of the scene which he has pictured with more than ordinary success. Our hats off to him!

E. H. S.

Waterproof Album-Covers

A CAMERA has come to be regarded as an essential part of a camping-layout. Snapshots of members of the party with their trophies of the hunt, their catches of fish, and showing little details of camp-life, are prized for years afterwards. Many a valuable collection of photographs has been ruined by rain in camp. A camp-album should have a waterproof cover. Book-binders, blank-book manufacturers, etc. are now using a pyroxylin-coated fabric for book-covers that is as watertight as a rubber-boot. A photograph-album bound in this material will protect camp photographs from rain.



OUR ILLUSTRATIONS

WILFRED A. FRENCH



THE picture which first greets the eye, this month, is the "Maid of Marblehead," an early New England maiden whose story is interestingly told by Raymond E. Hanson, the photo-pictorialist. In poetry and romance she is likely to rival Priscilla whom Longfellow has invested with more myth than historical truth.

Data: August, 10 A.M.; sunlight; 4 x 5 Korona camera; 9-inch Synthetic lens; at F/8; 8-time color-screen; 1/25 second; Orthonon plate; pyro; enlarged on Professional Cyko.

The nature-studies by Kenneth Smith are the result of skill and considerable patience. The butterflies resting on flowers, Mr. Smith assures me, represent truthful incidents; well placed in the picture, the butterfly on page 5 was *not* "placed" on the blossom by the artist, but alighted spontaneously. The arrangement on page 8 yields a notably novel and successful composition, one butterfly (at the left) and the shadow of the other forming the base of an artistically-formed triangle. The humming-bird, page 6, is the result of rare technical skill, in that the fluttering wings of the tiny creature yielded to the great speed of the shutter.

The work of the members of the B. Y. M. C. Union Camera Club has already been mentioned in complementary terms in these pages, so that further reference would seem superfluous. In the current issue, Mr. Osborne may be said to have dealt fairly with the task assigned to him. All that remains for me to do is to supply the data of the fourteen pictures that accompany Mr. Osborne's able review.

"The Dancer"—page 10; August, 11 A.M.; sun; 4 x 5 Soho camera; 8-inch Pinkham & Smith lens; stop, F/6; 1/50 second; Hammer D.C. Ortho; pyro, in tank; print, Velours Buff.

"Brewer-Fountain at Night"—page 11; Boston Common; November, 1920; 9 P.M.; 5 x 7 view-camera; 9½-inch Verito; stop, F/5.6; Wellington Anti-screen; M. Q.; exposure, *one hour*; print, Velours Black.

"Gloucester Fishermen"—page 12; August, 3.45 P.M.; lazy; 8 x 10 Soho camera; 8-inch P. & S. lens; stop, F/6; 1/50 second; Hammer D. C. Ortho; pyro, in tank; print, Velours Buff.

"Bug-Eye"—page 13; Sept., 10.30 A.M.; Hampton Roads, Va.; fair light; 4 x 5 Cycle Graphic; 6-inch Ross Homocentric; stop, F/16; 1/25 second; Orthonon; pyro; contact platinum print from enlarged negative on Seed 23 plate.

"From the Shore-Path"—page 14; Sept., 9 A.M.; strong light; Ansco Speedex (2¼ x 3¼); 3¼-inch B. & L. Tessar; stop, F/11; 1/25 second; Eastman roll-film; Rytol; enlarged Velours Black. An exemplary foreground-study.

"Mallard Duck"—page 15; Ipswich Marshes; November, early A.M.; good light; 1/1000 second; Standard Orthonon; pyro, in tank; enlarged print on Artura Carbon Black.

"Miss G."—page 16; home-portrait; made about 2½ feet from south window; October 20, 4.30 P.M.; clear light outside; R. B. Graflex 3¼ x 4¼; 7¾-inch Protar VIIa; stop, F/6.3; 10 seconds; Wellington Anti-Screen plate; hydro, in tray; enlarged on Wellington Carbon with Port-Land lens.

"Mr. Kiley"—page 17; indoor-portrait; October 1,

1920; good light; 12-inch focus; 2 P.M.; 5 x 7 Wizard view-camera; P. & S.; stop, F/6; 2 seconds; Standard Polychrome plate; pyro-metol; enl. Defender Enlarging Argo.

"Nude-Study"—page 18; Jan., noon; dull morning-light; quick bulb-exposure; 6½ x 8½ studio-camera; B. & L. Tessar; stop, F/4.5; Cramer Hi-Speed; metol; Dockham formula; Artura Carbon Black; auxiliary nitrogen used with daylight.

"Portrait"—page 19; made in B. Y. M. C. U. Camera Club rooms; March, 8 P.M.; Parallax light; 3 seconds; 5 x 7 Korona view-camera; 12-inch Velostigmat; stop, F/5.6; Cramer Inst. Iso; pyro; Artura Carbon Black; enlarged with Verito lens.

"Street in Albi, France"—page 20; June, 9.45 A.M.; fair light; 1/25 second; Richard Verascopie (4.5 x 10.7 m.m.); 2½-inch Tessar; stop, F/8; Eastman Extra Rapid Orthonon plate; pyro, in tank; enl. Eastman P.M.C.

"Fisherman—Hangchow"—page 21; Sept., noon; hazy light; 1/50 second; 3¼ x 4¼ Graflex; 8½-inch Zeiss-Tessar; stop, F/8; 1/50 second; Film-Pack; Eastman Powders, in tank; enl. Wellington Bromide.

"Decorative Winter"—page 22; Feb., 10 A.M.; good light; 1/30 second; 6½-inch single lens (Seelig formula); at stop F/3.2; 3-time color-screen; Standard Ortho; pyro; Artura Carbon Black.

"Evening on the Shawsheen"—page 23; made at Tewksbury, Mass.; August 6 P.M.; at sunset; ½ second; 3¼ x 4¼ Graflex; 6½-inch P. & S. lens; stop, F/8; 3-time color-screen; Orthonon; pyro; Artura Carbon E.

The preceding fourteen pictures were awarded prizes at the members' annual exhibit of the B. Y. M. C. U. Camera Club, Boston, Mass., held April 4-16, 1921, as follows:

"The Dancer," second prize, Genres. "Fountain at Night," first prize, Miscellaneous. "Gloucester Fishermen," second prize, Marines. "Bug-Eye," first prize, Marines. "From the Shore-Path," H. M., Landscapes. "Mallard Duck," H. M., Miscellaneous. "Miss G.," H. M., Portraits. "Mr. Kiley," first prize, Portraits. "Nude-Study," H. M., Genres. "Portrait," second prize, Portraits. "Street in Albi," H. M., Miscellaneous. "Fisherman—Hangchow," first prize, Genres. "Decorative Winter," first prize, Landscapes. "Evening on the Shawsheen," second prize, Landscapes.

Group by the Editor. Page 24. A picture without merit deserves no space.

Though a literal portrayal of a pleasing scene, Mr. Waugh's picture, page 26, shows an earnest appreciation of attractive material, and has tastefully combined feminine beauty with nature's charm. Instead of posing, the model conveys the movement of picking a flower. The technique leaves nothing to be desired. Data: 8¼-inch Zeiss-Tessar; stop, F/8; Standard Orthonon; pyro. The group of snow-covered asters, page 27, is a typical winter-effect. Data: Feb., 8 A.M.; fair light; lens used at stop F/16; 1/10 second; Standard Orthonon.

William Ludlum showed his patriotism by displaying the national emblem in front of his home, July the Fourth, a year ago. Taking the subject as a theme,

he wrote a short poem. The two appear on page 29. Reference to the American Flag, how it should be respected, has been made by the Editor, and will be found not far from this page. Data: July 4, 1920; 5 x 7 Premo; 8¼-inch R. R. lens; used at F/8 (full opening); 5 x 7 Stanley plate; pyro; contact Cyko point.

Advanced Workers' Competition

KATE MATTHEWS has long been noted for her success in picturing child-life. Her illustration of a poem from Robert Louis Stevenson's "Child's Garden of Verse," page 33, is capital. Unfortunately, in her desire to include the bed on which the child is sitting—necessitating the use of a short focus lens—the photographer distorted the perspective. The omission of the nearer bed-posts may not have proved detrimental to the success of the composition. Data: June, 10 A.M.; bright light, R. R. lens; 5 seconds; Seed 26 plate; pyro; print, Artura Iris C.

"The Daily News," page 34, speaks well for Geo. W. French's creative ability and artistic skill. The group dominates the interior in which there is no distracting object. The setting has been exceedingly well managed in this respect. The immediate foreground and the ceiling are low in tone—well tapered off. The readers are deeply concerned in the news, forming an admirable example of concentrated and protected interest. Data: August 16, 1920, 10 A.M.: sun outside; 5 x 7 view-camera; 14-inch; B. & L. R. R. lens; stop, U. S. 16; 2 seconds; Standard Orthonon; pyro-print, Artura Iris.

Hannah G. Myrick's picture, page 35, is a home-scene, although the human interest is momentarily absent. The room, though belonging to a camp in the woods, is generously and comfortably furnished, though not overworked with objects, and, with no bright spots to offend the eye, the total effect is harmonious and restful. Dr. Myrick's camera-activity, merely as a diversion, began only about three years ago, since which time she has shown steady progress, and always a high degree of intelligence. Hence, in making this interior, she gave more time than really necessary, thus avoiding underexposure and consequent harshness and lack of detail. Data: camp situated in dense woods (New Hampshire); clear day; Sept. 2, 1914; Icarette C. (2½x3¼ in.); 3½-inch Z. & L. Zeiss-Tessar Ic. F/4.5; stop, F/22; one hour (12.15 to 1.15 P.M.); fire was stirred up during the last few minutes of exposure; Rytol, ½ normal (19 minutes); enl. Enlarging Cyko Buff; M. Q.

Beginners' Competition

ELLEN C. HILDEBRAND's still-life, page 39, has much merit. The objects necessary for a tea are present and fairly well arranged, although it is not evident that the unlighted candle has anything to do with the affair, unless the repast is anticipated, when light, other than gas or electric, shall be available. It is possible that an arrangement other than the present one would have yielded a more pleasing result—the fewer objects the better, for the most effective and artistic still-life. The values are good. Data: March, 1921; bright light (about four feet from window); 4 x 5 Korona camera; 6-inch Conly R.R. lens; at full opening; 6 seconds; Orthonon; M. Q.; print, Azo Grade E.

Example of Interpretation

THOUGH not so clearly defined as are most marine-views, Mr. Starr's picture of the Maine coast page

36, is very satisfying. The data are interesting: Popular Pressman camera; stop, F/5.6; W. & W. K2 color-screen; Standard Orthonon; 1/60 second; 6 x 9 Cyko enlargement.

Our Contributing Critics

WHETHER the task set our assistant-critics will be found easy or difficult, is hard to say. Certainly, the picture presented for their consideration, page 42, is very attractive. Data: Scene on Yellowhead Lake, Lucerne, B.C.; June, 6.30 P.M.; bright light; Eastman 4 A (4 x 5); 6½-inch R. R. lens; stop, F/8; 1/25 second; Eastman roll-film; pyro, in tank; print, Azo Hard.

Boston's Pictorial Wealth

It is doubtful whether any American city can equal Boston, Massachusetts, in the character and wealth of camera-material for the photo-pictorialist at all seasons of the year. In summer, especially, the tourist-camerist, in search of charming views, will be repaid by a visit to the chain of parks that extend from Back Bay Fens to the Stony Brook Reservation, of which Riverway—which begins at the junction of Boylston Street, Audubon Road and Riverway Boulevard—offers camera-subjects, which have beauty and variety all their own. As one stands on Boylston Street, looking towards the three-arch bridge that spans the slow-moving waters, one obtains a pictorial theme that makes an instantaneous appeal by reason of its exquisite beauty. This particular scene is always beautiful, whether viewed early in the morning, late in the afternoon or even at noontime. The play of light and shadow produces a successive number of charming effects throughout the day. Even when seen by artificial illumination, furnished by a powerful arc-light, nearby, this spot is a delight to the eye. As one passes slowly along the walk at the left and looks in almost any direction, including a portion of this quiet stream, one can see how innumerable attractive views come into being. The camerist now continues along this path, through the left and smaller arch of the bridge, and beholds new visions of beauty which change at every step. As one looks across the stream towards the north, one beholds the square tower of the Sears Memorial Church, which, together with the trees and bushes in the foreground, furnishes a series of interesting views. An attractive feature of the scenery in this locality is the numerous picturesque foregrounds furnished by the tall reeds, grasses and bushes that line the stream on each side, particularly the shore along which the pedestrian is now walking. Riverway is noted also for the variety of beautiful trees that line the slope which extends as far as Aspinwall Avenue.

The entire stretch, of about one-half a mile, along the walk described, with the stream and several arched bridges at the right, will supply so many charming views for the camera, that it is difficult to enumerate them. Suffice it to say, that appreciative and discriminating camerists can find material in this locality to keep them busy for a very long time. It is no exaggeration to say that one should be able to obtain at least several hundred artistic subjects which would be difficult to match in any of the beautiful parks that may be found in any of our large cities. In view of the rich and variegated coloring that marks the shores of Riverway in spring, summer and autumn, the Autochromist and Paget color-worker will find grateful subjects for the respective natural-color processes.

W. A. F.



ON THE GROUND GLASS

WILFRED A. FRENCH



The Direction of the Eyes

GEORGE W. HARRIS, of Washington, the personal photographer of Ex-President Wilson, who held his position till the end—he may do so, even longer—introduced the Editor to a friend at one of the National Conventions, several years ago. An hour or so after this social amenity, Mr. Harris asked the "Photo-Era man" how he liked his tall friend. "Well; he is one of those men," was the frank reply, "who cannot look you squarely in the eye. All the time he was talking to me, his eyes were lowered in front of him. Not once did he raise them. That sort of a man doesn't appeal to me." "Now, see here, Mr. French," Mr. Harris retorted, bristling up, "the fault is all yours. Talk about a man not looking you squarely in the eye—if you keep wearing that ravishing Paris sear-pin of yours, any man, even myself, will keep staring at it with admiration and envy. It is simply fascinating! Let me wear it for a while, and you'll have no trouble about people looking you squarely in the eye."

The bauble that threatened to queer one man's character, was the head of Cleopatra of exquisite, artistic design and fashioned by a Paris jeweler. It was worn by the Editor from 1903 to 1920, but was lost by him last summer. It has not been recovered and, probably, never will be.

All is Not Gold that Glitters

WHILE I approve and encourage a photo-salesman to go into business for himself—provided, of course, he is thoroughly well equipped and has the necessary capital—I believe that he should also possess the right sort of personality and temperament. There are other requisites, such as business-integrity, a sense of fairness and of justice, foresight, patience and optimism.

Not long ago, I met a young camerist who, while waiting for his purchase to be assembled and done up, strayed into the store-room where two clerks were checking the invoices of several large lots of chemicals that had just been unpacked and placed on the counter. Not thinking that he might be *de trop*, he remained a few minutes, when he happened to overhear that the cost-price of a certain compound he had just bought at eighty-five cents for a one-ounce bottle, was only forty cents. "Great Scott!" said he to himself, "that's over one hundred per cent profit! I guess I'll go into that business." A well-known fixative of which six kegs were called off, he observed cost this profiteering firm three cents a pound, and he, poor soul, had just paid forty cents for five pounds! "Now; that's sheer robbery," he thought and, with this impression of extortion in his mind, he retired quietly, took his parcel of supplies, and left the store.

He was resolved to enter the photo-supply business, throwing up his position as salesman in a well-known toy-store, at \$25.00 a week. He had \$800 laid up in the bank; was a successful salesman and, what was also important, an all-around photographic expert. On the following day, Saturday, he gave his employer the customary one week's notice that he was going to leave. On the first day of his last week as a salesman, he was called into the private office of the em-

ployer who had always been a friend to him and who, in a kindly voice, asked him his reason for leaving. The clerk explained. The merchant smiled, saying that he happened to know that on most photographic supplies the discount to the dealer was about twenty-five per cent, and, as it cost him from 10 per cent to 15 per cent to do business, 10 per cent profit was not much to boast of, unless he did a large volume of business. Then he took the young man into his confidence, declaring that he, himself, was a "profiteer." Dolls, for instance, that he bought for \$2.00 each, at wholesale, he retailed at \$3.00; but he took pains to explain that some are accidentally broken and, what was worse, many are left on hand, being sold afterwards at less than actual cost. He also mentioned losses by bad accounts and, especially, overhead-expenses, including rent, express-charges, telephone, advertising, insurance, and depreciation of merchandise—all of which reduced these "gigantic" profits to a net profit of 15 per cent. There were also anxieties to be considered, and the uncertainty of business. Concluding this friendly talk, the toy-dealer said: "You now go home every Saturday with \$25.00 in your pocket, while I cannot always draw what I need out of the bank, and carry home with me all the worries of the business. Think it over before you decide to make the change; but go to it, if you are sure you can better yourself."

The result of this talk was that the salesman changed his mind and continued to sell toys in a store where he received good treatment and had fair prospects for advancement.



A Loyal Statesman

REID S. BAKER, proprietor of the popular photo-supply store in Washington, D.C., sent me the following amusing episode that occurred in his store recently, when a well-known Republican senator came to make a purchase for a member of his family. "I am not sure of the name," he said, "but it's G. O. P. paper I have been asked to get. Please give me a dozen of 4x5 size." Mr. Baker replied that it most likely was D. O. P. that he wanted. "Excuse me," remarked the American statesman, smilingly. "You see, the mistake is only natural," at which both customer and merchant broke into hearty laughter.



There Are Others

PHOTO-ERA MAGAZINE: Your managing-editor seems to take it amiss that his name, Wilfred, is sometimes wrongly spelled. Now, the surname of one of America's finest photo-pictorialists, Wm. E. Macnaughton, is so frequently distorted, that it's hard to tell whom is meant. I've seen his name printed variously, McNaughton, Macnaughton, MacNaughton and McNaughton. Friend Eickemeyer has a similar fate. So, cheer up! By the way, that's a good pun you made on the name of Dr. C. E. K. Mees of Kodak fame.

K. F. A.



ANSWERS TO QUERIES



J. W. L.—With regard to dissolving one-quarter pound of sodium carbonate and one half pound of sodium sulphate crystals, we would say that you can dissolve these chemicals in a quart of hot water; and when it has become cold it will not crystallise out.

C. O. H.—The value of your used photographic outfit is a difficult matter to decide. Our suggestion would be for you to visit a number of dealers who carry used cameras and lenses and note what they charge for an outfit such as yours. Also, you may see an advertisement in the photographic magazines that may be of assistance. Often, you will do better to insert an advertisement yourself and name the price that you consider to be fair. Usually, the price is considerably less than the regular price of a new outfit; but if you happen to find some one who is eager to obtain an outfit such as yours you may not be obliged to suffer a very great loss.

S. F. B.—For popular sale, glossy postcards are best. Of course, there are exceptions; but in most cases the public likes a "shiny" postcard of views, buildings and points of interest in a town or city. There are those who appreciate and admire a well-finished sepia or semi-mat card; but their sale is somewhat limited when compared to the general popularity of the glossy postcard.

P. M. T.—Acquire proficiency with the rapid rectilinear lens before attempting to master an anastigmat. We understand that you are planning to purchase an anastigmat lens for your new camera. As we have already suggested, before you make the change convince yourself that you can make good pictures with the present equipment. You will obtain better results with the anastigmat. By all means, get an anastigmat; but not before you can use it to advantage.

F. C. K.—Optical glass is affected to a greater or lesser degree by light and atmospheric conditions. Some glasses are more sensitive than others. As a rule, the anastigmat lenses are apt to be affected more than cheaper lenses because high-grade lenses receive a higher polish. It must be remembered that highly polished optical glass closely resembles highly polished steel in that light and moisture cause corrosion. In some cases, lenses that are protected carefully never show discoloration or other defects—even after years of service. The photographer should see to it that his lens is always capped or otherwise protected from light and moisture when it is not in use. You should never leave a camera and its lens exposed to direct sunlight, for by so doing you may not only fog the unexposed plates or films, but cause serious damage to the lens.

W. O. C.—There are three general types of lens-construction mentioned in lens-catalogs. An unsymmetrical lens is one whose front or back combination, usually, may not be used alone. A symmetrical lens is one which permits the use alone of either front or back combination. As a rule, both are of the same focus. A convertible lens is one in which the front combination is of a different focus from that of the back combination—thus giving three focal

lengths in the same lens. To illustrate: an unsymmetrical lens might be of 6-inch focus only; a symmetrical lens of 6-inch and 12-inch focus; and a convertible lens of 6-inch, 9-inch and 14-inch focus.

S. D. O.—Whether or not the use of F/3.5 anastigmat lenses is to be advised generally is a debated question. The great speed of the lens permits exposures to be made under conditions which would render slower lenses useless. On the other hand, how many times does the average amateur-photographer attempt to make pictures under conditions which an F/6.3 or F/4.5 lens would not take care of efficiently? When all is said and done, the advisability of using an F/3.5 lens is a question to be decided by the individual. An important factor in the decision should be the ability of the amateur to use such a lens successfully.

W. K. B.—A shutter-speed of 1/300 of a second will stop all ordinary moving objects. Without a doubt the focal-plane shutter is the most efficient for high-speed photography. However, successful diving, running, baseball, football and airplane pictures have been made with a between-the-lens shutter working at a maximum speed of 1/300 of a second. In making speed-pictures with a between-the-lens shutter the photographer should select his angle of view carefully, so as to avoid having the subject pass the camera at right angles.

C. K. O.—Most shutters may vary in speed if turned on their sides or inverted. This possibility should not be overlooked, particularly when engaged in making important pictures. The variation may not be very great, and probably in most cases the camerist would experience no trouble. If roller-blind or focal-plane shutters are being used it is well to make sure that the tension-spring has been tightened sufficiently to close the shutter—no matter in what position it may be held.

J. H.—Development of negatives by the glass-positive methods. Make your glass-positive by contact, as you would a lantern-slide or window-transparency, and from that make as many negatives as you wish. If you wish to make enlarged negatives, first make an enlarged positive in the enlarging camera by any of the light-sources that are popular and effective. Many professionals make these enlarged positives by direct daylight—a very simple matter—and from these enlarged positives make contact negatives.

J. S.—Drying unwashed negatives and prints after fixing is not to be recommended, unless this is done in a darkened room. Without going deeply into the chemistry of the matter, we should say that plates or prints that have been fixed but have not been properly washed should not be exposed to bright light to dry and, after a lapse of many hours, thoroughly washed in the hope of removing every trace of hypo.

The way is to proceed as advised and then to wash them for many hours, as long as they need light.

Our suggestion would be to dry them in a darkened room and afterwards wash them thoroughly in ordinary light; because hypo, remaining in the film, will be acted upon by bright light and affect the print or negative, more or less.



EVENTS OF THE MONTH

Announcements and Reports of Club and Association Meetings, Exhibitions
and Conventions are solicited for publication



Our Flag

LOVE of country, patriotism, are pictured in the emblem that is dearest to the heart of every true American—his Flag. Mr. Ludlum, in his expressive poem and picture shown elsewhere in this issue, illustrates this noble sentiment in an impressive way. It is strange that a thing that we revere so deeply, that is so sacred, should not be treated with more respect than it is. The Stars and Stripes is used largely as a symbol of business and trade, and to such a degree that the beautiful emblem is cheapened. We all know that when a thing is used to excess, lightly and without meaning, it loses much of its interest and personal appeal. Let the American Flag be displayed on patriotic, significant occasions, such as Washington's Birthday, Lincoln's Birthday, Inauguration Day, Memorial Day, Flag Day, the Seventeenth of June and the Fourth of July, which suggest American liberty, and the right and privileges of a free nation. If a business-house wants to display a banner from its flagpole on other days, let it be its own personal flag—an emblem of business-enterprise. To be effective, such a flag should bear a design that is at once original and appropriate. Moreover, the design of a flag—the personal, copyrighted property of the business-firm—can be utilised in its advertising-propaganda and serve as a mark of identification—which, like a trademark, can be recognised by all the moment it is seen. Then, on festal days, the American Flag can also be displayed and the two flags shown side by side, or one above the other. Of course, Federal and State buildings are privileged to fly the national emblem at all times. The custom of displaying the American Flag at half-mast from public buildings, or elsewhere, on the death of a prominent and worthy American citizen—as a token of respect—is commendable, and should be continued. But to use our sacred emblem for advertising-purposes, and for senseless decoration—as seen in barber-shops, shoe-blackening places, fruit-stands, at picnics, sporting-events, promiscuous outings and merry-makings, is reprehensible and ought to be made a Federal offense.

Let every patriotic American business-man and citizen think this over.

W. A. F.

Honoring the American Flag

IN referring to the observance of Flag Day, June 14, the *Boston Transcript* was moved to exclaim—"The flag flies for Flag Day. Good! It is a fine institution, this annual honor to the banner of our country. And every day until the next Flag Day comes around, and every day thenceforward and forevermore, let the Stars and Stripes be in your heart."

Italy Honors George Eastman

WE learn from Rochester, N.Y., that Rolando Ritchie, Italian Ambassador to the United States, has conferred upon George Eastman the order of the Crown of Italy, at the request of King Victor Em-

manuel, in recognition of Mr. Eastman's personal achievements in giving to the world useful inventions and, by his own exertion, rising from obscurity to fame. In thus becoming a Knight of the Italian Crown, Mr. Eastman's philanthropy is also recognised, for he has given most liberally, not only to institutions of learning, but without stint to charitable enterprises of a worthy nature. The ceremony of presenting Mr. Eastman with this Italian decoration took place at Rochester, June 12, after an enthusiastic reception had been given to the Italian envoy, attended by the Italian people of Rochester, on the occasion of the unveiling a captured Austrian field-piece.

Our Editorial Page

ANSWERING several inquiries, I wish to state that, without one single exception, every word on the Editorial page of PHOTO-ERA MAGAZINE, for the past fourteen years, has been written by its Managing-Editor, Wilfred A. French, Ph.D., ever since he became prominently identified with the publication, January, 1907. Even in the summer of 1909, when Mr. French went to Europe to attend the International Photographic Exposition, at Dresden, he saw to it that the Editorial page was filled exclusively with matter from his pen. This may be regarded as a record in photographic journalism. Others on the editorial staff, besides Mr. French, prepare and edit literary and pictorial material; but to him exclusively is left the Editorial page.

A. H. BEARDSLEY, *Publisher.*

Francis O. Libby's Show at Boston

THE exhibition of prints by Francis Orville Libby, of Portland, Maine, which was held in the art-gallery of the Society of Arts and Crafts, Boston, Mass., June 1-15, was brilliantly successful. A finer demonstration of the artistic possibilities of the gum-process has never been seen in the rooms of the Society. It seems as if Mr. Libby could not have chosen a better medium to express his eminent artistic qualities—atmospheric perspective, sense of proportion, imagination, mystery and poetic feeling. These attributes were noticeable in the forty examples of Mr. Libby's work, but were specially pre-eminent in "Mt. Adams"; "The Portal" (Ionic colonnade); "The Lake," and other subjects. The artist's power of imagination was impressively illustrated in a series of three views of Niagara Falls, each giving but a portion of the wide stretch of the cataract and, in this manner, conveying a more vivid impression of the power and grandeur of the falls. Another feature of Mr. Libby's artistic equipment is his versatility in the selection and treatment of his various subjects. He suits his style to the character and mood of his theme. Thus, "The Lake"—"A Decoration" (No. 21) is expressed with all the airiness, delicacy and grace that the subject demands—and receives from an artist of a flexible and adaptable mind, as is Mr. Libby's. In each of the prints shown—gums in various appropriate and convincing tones—purple,

warm black, brown and sepia—the soulful personality of the artist was dominant, giving the beholder an insight into the nature and purpose of the author of these masterful creations.

Among the art-critics of Boston, none was more enthusiastic than Mr. Downes of the *Boston Transcript*, from whose review of Mr. Libby's exhibition we quote the following: "His employment of the gum-process in the making of landscapes is marked by a distinct artistic intention in each instance, and the best of his works are in the nature of impressions, with personality back of them, quite devoid of the soulless literalism that was formerly associated with photography. A notable group composed of three prints of Niagara Falls illustrates this point; these pictures are not merely descriptive or illustrative, but seek to give, and to some extent succeed in giving, the general impression of vastness, power and irresistible movement that one receives in contemplating this mighty spectacle. And it is worth noting that this is gained, not from comprehensive 'views' of the falls, taking in everything within the range of vision, but from chosen segments of the cataract, which leave something to the imagination."

Many of the prints shown here have been hung at the salons of Los Angeles, Pittsburgh, Buffalo, Montreal, Toronto, London and Copenhagen, of which institutions Mr. Libby is a member, being also a master-craftsman of the Society of Arts and Crafts, Boston, U.S.A.

W. A. F.

Camerists on Tour

To what extent photography stimulates travel in this country and abroad is shown by members of various camera-clubs who are already beginning to tour America and Europe. Among these fortunate camerists is Charles G. Wells, member of the Boston Y. M. C. U. Camera Club, who, with his sister, is now enjoying a two months' tour to Arizona and Colorado. His itinerary includes a three weeks' sojourn at Estes Park, which is famous for its magnificent situation and beautiful scenery. Mr. Wells intends also to visit and photograph the Grand Canyon of Arizona, and several others of our national parks. Being a skilled and experienced photographer, Mr. Wells is expected to return with a large collection of successful camera-efforts and mental souvenirs.

Cleveland Photographic Society

The Cleveland Photographic Society has moved from 1110 Huron Road to better and more commodious quarters situated at "The Towers," 6106½ Euclid Avenue, Cleveland, Ohio. A modern darkroom and projection-printing facilities, as well as a fully-equipped studio for the use of members, will soon be provided.

The Cleveland Photographic Society is affiliated with the Associated Camera Clubs of America, and receives the print-and-slide exhibits sent out by the Associated Clubs, which, together with local exhibits, are hung on the exhibition-panels for criticism by members. Besides, there is a regular program of an educational character covering all the branches of photography—printing in different mediums; lanternslide-making; photo-chemistry; projection-printing; sepia-toning; pictorial composition; lens-optics, and other subjects of practical interest to amateur-photographers.

There are also two classes in studio-portraiture with professional photographers as instructors.

MAX E. REUTER,
Secretary.

The Maid of Marblehead

This picture, which appears on page 2, also on the front-cover, of this issue, was exhibited at Raymond E. Hanson's show, at the Arts and Crafts Society's rooms, Boston, Mass., last April, and was greatly admired. Mr. Hanson sold a number of copies in the form of an 11 x 14 print, trimmed to 9 x 14 according to the requirements of the composition, and mounted with wide margins on a white board. The price is \$6.00. Anyone who desires to obtain a copy of this delightful historical picture of a maiden whose history is more extended and interesting than that of Priscilla, will please address Raymond E. Hanson, North Wilmington, Mass., U.S.A.

Dr. Dwight L. Elmendorf

DR. DWIGHT L. ELMENDORF, this veteran photographer, world-traveler and lecturer—also well known to the early workers by his photographic classic, published twenty-one years ago, on the subject of the making and coloring of lantern-slides—entertained the members of the New York Camera Club, recently, with a lecture, entitled "Fifty Years Behind the Camera." The talk was all the more interesting, because it was illustrated by original lantern-slides prepared and colored by Dr. Elmendorf. Among these lantern-views were pictures which Mr. Elmendorf had made in various parts of the world, where he has traveled, and also a number of New York City, made as far back as 1878.

There are few camera-clubs in this country, to-day, that have had the rare opportunity to be entertained by members who are veteran photographers, and who have seen and accomplished as much as Dr. Elmendorf.

A Word from Turin, Italy

THROUGH the courtesy of Mr. Herbert B. Turner, we are able to quote a few lines from a letter that he received from Dr. Theodorico Morra, Turin, Italy. Dr. Morra is a subscriber of PHOTO-ERA MAGAZINE and a personal friend of Mr. Turner's.

In speaking of photographic conditions in Italy at the present time, Dr. Morra says, "It is almost impossible to obtain Kodak goods here. On the contrary, the shop-windows are filled with German cameras and a few French ones. The Ica camera, like mine, exactly the same model with Tessar F/4.5, is everywhere priced at 885 Italian lire. Also, for films, plates, accessories, chemicals, nothing but German goods are to be found." It is evident that Italy is going through a photographic reconstruction-period no less important than that of her political life.

Is a Photograph a Graven Image?

A NEW interpretation of Exodus 20:4 has come to light through the state department and its denial of the appeal of Carl W. Johnson of Chicago. According to the Bible, Exodus 20:4, we read, "Thou shalt not make unto thee any graven image or any likeness of anything that is in heaven above, or that is in the earth beneath, or that is in the water under the earth."

It seems that Mr. Johnson wished to go to Norway and Sweden as a missionary and, naturally, he was obliged to obtain a passport to which the regulations require that his photograph be attached. Apparently, the passage in Exodus was sufficient reason for him to refuse to have his picture made and duly attached to his passport. The local passport-office refused to con-

sider his application without the necessary photograph. Mr. Johnson applied to the state department at Washington; but the ruling of the local passport-office was upheld. Then, Mr. Johnson made an appeal directly to Secretary Hughes; but without success. Hence, the net result of Mr. Johnson's appeal is a ruling to the effect that persons with religious scruples against having their photographs made cannot obtain passports to travel abroad.

To say the least, this incident is interesting and we wonder, speaking of photographs, why a painting or a statue does not come under the ban of this verse in Exodus. Obviously, we intend to begin no religious discussion; but merely to point out a rather unusual interpretation of the religious status of a photograph.

Officers of the Portland Camera Club

At the recent annual meeting of the Portland Camera Club the following officers were elected for the ensuing year: president, E. Roy Munroe; vice-president, Roger Paul Jordon; secretary-treasurer, C. M. Jaquith; print-director, J. Ludger Rainville; lantern-slide director, Wallace C. Skillin; membership-committee, Charles L. Hutchinson, F. D. Sampson and Harvard L. Armstrong. The club is to be congratulated upon the acquisition of such experienced, capable and enthusiastic officers.

Exhibition by Clara E. Sipprell

MISS CLARA E. SIPPRELL of 70 Morningside Drive, New York, gave an exhibition of pictorial photographs at the studio of Mary Cobb Wilson, 33 East 57th Street, New York, from May 17 to May 24, 1921, the display consisting of about fifty examples of portraiture, landscapes and illustrations.

A Letter That We Appreciate

PUBLISHER OF PHOTO-ERA MAGAZINE:

I enclose cheque for renewal of my subscription. It is without a doubt the best value for one's money on either side of the Atlantic Ocean. If a person has got anything in him or her, PHOTO-ERA MAGAZINE will bring it out. Everybody cannot be high-class pictorialists, but a constant perusal of your magazine will enable anyone to become better. It teaches you to enjoy other people's pictures and to see beauty in everything. In short, it gives a soothing effect to hearts and minds that might otherwise become hard and bitter through the hard knocks of a material world.

I wish the best of luck to all connected with PHOTO-ERA MAGAZINE.

Yours respectfully,

WILFRED HILTON.

APFONAUG, R.I.

Toronto Photo-Exhibition

THE THIRTIETH Annual Exhibition of photographic prints of the Toronto Camera Club, Toronto, Canada, will take place from August 27 to September 10. Entry-blanks which contain all necessary information may be obtained from the secretary of the Exhibition-Committee, J. R. Lawson, 2 Gould Street, Toronto, Canada. This promises to be an unusually important show, being international in character, and interested exhibitors should make immediate preparation, as time in the summer passes very rapidly with camerists.

An Unfortunate Coincidence

May 28, 1921.

EDITOR PHOTO-ERA MAGAZINE:

In your recent May number I noticed an article headed "Watch for this Impostor" in the Events of the Month column. On reading the article through, I saw that the description tallied to myself even to the bald spot, with the exception of one initial and height; am only five feet four inches. Also hail from California. I wonder if something couldn't be mentioned in your magazine that I am not the person referred to in your article, and a lot of my Eastern friends may think that I am the person referred to, for after the Armistice I was stationed in the Middle West, particularly in Ohio.

Sincerely,

(Signed) Harry A. Erickson,
Capt. Air-Service Reserve.

(We are glad to print Mr. Harry A. Erickson's letter in full and to express our regret that our well-intentioned effort to protect our readers should have resulted in such an embarrassing and annoying coincidence. However, do not forget that *A. Erickson* is still at large and eager to work upon the credulity of unsuspecting photographers.—EDITOR.)

Frederick B. Taylor

MANY of our readers will learn with regret of the passing away, at Saranac Lake, New York, of Frederick B. Taylor. For a number of years, he has been afflicted with an incurable disease. In spite of much suffering and the knowledge that he could never get well again, he accepted his lot with fortitude and without complaint. Mr. Taylor, as many know, was an enthusiastic amateur photographer. He was a contributor to PHOTO-ERA MAGAZINE and to other photographic publications. His interest in this direction was maintained to the very last. His wife and son survive him and to them we extend our sincere sympathy.

Dr. Brinkman's Lightning-Picture

THROUGH an unfortunate misunderstanding the editorial comment and data for Dr. Brinkman's interesting picture of a flash of lightning, page 282 of the June issue, was omitted. We hasten to make amends. The picture is remarkable in that the electrical discharge took a horizontal instead of the ordinary vertical form. Luckily, if not partly by design, the arrangement of the masses is effective and pleasing. Data: Rocky Mountains; September, 10.30 P.M.; 3 x 5 1/4 Rochester camera; Turner-Reich anastigmat; stop, F/8; exposure by flash of lightning itself; film-pack. Dr. Brinkman says, "It was my first attempt at making lightning-pictures."

Fulsome Praise

A.—"How did you like Hazy's show at the Macbeth Gallery?"

B.—"Admirable; I assure you."

A.—"You don't seem very enthusiastic."

B.—"Why, yes—ticked to death. It was awfully good—best I ever saw in all my life! I'm crazy about it. Had the time of my life, and am dying to go again!"

A.—"Now you're talking!"

Fulsome praise? "Foolsome," would be better.



LONDON LETTER

CARINE AND WILL CADBY



We never before, perhaps, quite realised the penetrating importance of coal. Daylight is the only safe and unextravagant medium to print by, nowadays. Even electricity is being rigorously curtailed, and gas is still more stringently rationed. Our streets, too, grow darker, and there are rumors that if the coal-strike is not settled soon, our clocks will be put forward yet another hour.

The Photographic Fair luckily got through with flying colors, and scored its usual success, before conditions became as unpleasant as they are now. We visited it near the end, and it seemed more crowded than ever. All the old-established firms had their usual stands, and there were many novelties among the exhibits. Messrs. Houghton's new-pattern aluminium "Ensignette" certainly is a very capable little instrument. Accustomed to the old model, which always seemed heavy for its size, one was surprised at the extreme lightness of the new-pattern cameras. Featherweight describes them really quite accurately. They are made in two sizes and give pictures $1\frac{3}{4} \times 3$ inches, and $1\frac{1}{2} \times 2\frac{1}{2}$ inches. A wonderfully compact folding reflex camera is shown by Messrs. Newman and Guardia, the makers of exclusively high-class apparatus. It makes pictures $3\frac{1}{2} \times 2\frac{1}{2}$ inches and can be fitted with interchangeable lenses available for different-sized objects with the same camera-extension. Although it is a folding camera, it is so well constructed that, when open, it feels like a solid box. We entered the Kodak darkroom and witnessed a demonstration of this firm's new Eastman Projection-Printer. It is, indeed, an enlarging-made-easy method for those who work on a large scale and can afford the price of the apparatus is £120. The picture—of whatever size up to 30×40 inches—is always in focus. It is thrown on a flat table with the light overhead, so that any masking that has to be done during exposure, which is by foot-treadle, can be carried out with ease and exactness.

Mr. Percy G. R. Wright, for many years advertising-manager to Messrs. Houghton, was at the show, but more as an onlooker than in old days, now he has relinquished for the last three years his post, and entered the business of Messrs. Adams Brothers and Shardlow. He showed us some striking examples of color-printing for advertising-purposes made by his firm. They were very modern in conception and execution. Messrs. Dallmeyer's show of modern lenses was quite comprehensive. There were on view all the latest patterns of cinematograph and ordinary photographic lenses made by this progressive firm, among which most interest was centered on the new "Pentac" anastigmat, which works at F 2.9. This instrument is, of course, designed for cinematograph-work, and is approximately fifty per cent more rapid than the lenses usually fitted, which is a great advantage, especially as the extreme aperture has been obtained without loss of definition.

Messrs. Wellington and Ward, makers of plates, papers and films, are organising what should be a successful professional competition for the "most Beautiful Portraits of Ladies." They offer £1,000 in prizes, as follows:

1st prize, £300 to the photographer; £200 to the sitter.

2nd prize, £200 to the photographer; £100 to the sitter.

3rd prize, £150 to the photographer; £50 to the sitter.

The prizes are offered for beautiful *photographs*, not necessarily photographs of beautiful *women*. This is very clever, as all customers are encouraged to try their luck if they have faith in the photographic skill of their particular professional photographer; for, however plain they may be, they have the comforting assurance that their man has only to make the finest print sent in, to capture the first prize, quite apart from the good looks portrayed. So it should lead to much fresh work for the studios, and even those photographers who do not win a prize will have materially benefited by the scheme. The public dearly loves a "sporting-chance," and in this combination-competition, shared by the sitter and the camera-man, it seems that there are just the elements to attract many women who only want an excuse for having a new portrait made.

Mr. George Moore is publishing a book which is to contain a photograph of himself. This may sound commonplace to those who know this gifted author; but Mr. Moore's fantastic idea is that the original for the reproduction shall be a daguerreotype of himself as a "dear little boy with his thumb in his belt," who was lithographed in the sixties just before going to a Catholic school. On this nail Mr. Moore has hung half his pretace, and photography comes in for some hard hits. Mr. Moore is such a craftsman for words, and his style is such a miracle of artistic expression, that, even if we disagree with his matter, we can enjoy what from any less gifted writer might, perhaps, have ruffled our feathers. Talking of the camera, he exposes his ignorance of its modern developments by some amusing statements such as "If we learn anything from a photograph it is the apprehension of the ugly; for, photography being strictly circumstantial, the ugly is uglier in the plate than in Nature." And again "... its eye is not sensitive to color or modeling; it cannot stress or soften a line, transpose, add to or omit; for it is without the magic of touch. . . ."

The Royal Academy, our most important official painter-show, is open. It has generally been looked upon as behind the times, but it seems as if a new spirit is moving, for the number of pictures accepted has been far less than usual, and those hung are given more space. But in spite of these signs of grace, we failed to find any examples of the most modern developments in painting. This show undoubtedly has a marked effect on photographers and photography, and we could not help thinking that photography has exercised an influence on some of the painters represented.

To Use Portrait-Attachment and Ray-Filter

Born portrait auxiliary lens and the ray filter may be used at the same time with the $2\frac{1}{4} \times 3\frac{1}{4}$ or smaller Eastman attachments. From a piece of rather heavy galvanised iron plate cut a key, $1 \times 1\frac{1}{2}$ inches. By inserting this in two slots of outside cell ring, ray-filter glass can be removed and laid on top of portrait attachment lens—the ring of this cell must, of course, be removed too—and then kept in place with a few turns of the ring.

H. KROENIG.



BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished by us at the lowest market-prices. Send for our list of approved books.

TELEPHOTOGRAPHY. By Cyril F. Lan-Davis, F.R.P.S. Second edition, revised by Lionel Barton Booth, M.A., F.R.A.S. 12mo, 116 pages, including alphabetical index. Illustrated. Cloth, \$2.00. New York, U.S.A.: E. P. Dutton & Co., 1921.

The outstanding feature of the telephoto-lens is its power to give large direct pictures of distant objects. A mountain twenty miles away appears insignificant in an ordinary photograph. A telephotograph of the mountain may be made from the same standpoint, showing it thirty times as large as before. The telephoto-lens stands, in fact, in the same relation to an ordinary lens that a telescope does to the unaided eye. Details which are quite invisible to an observer, can be plainly shown on a telephotograph. The above-mentioned little work is intended for the use of telephotographers, imparting the rudimentary knowledge of this important and interesting class of photography. The beginner is made acquainted with various types of telephoto-lenses, either complete, or in the negative form to be attached to a standard anastigmat lens. Other chapters are devoted to the application of the telephoto-lens; the photography of near as well as distant objects; the correct length of exposure; perspective in the pictorial results, telemicrography, and photography of butterflies at rest, which, as everybody knows, are difficult to approach.

THE SILVER BROMIDE GRAIN OF PHOTOGRAPHIC EMULSIONS. By A. P. H. Trivelli and S. E. Sheppard. Octavo, 143 pages, including complete alphabetical indexes, profusely illustrated with photographs and diagrams. Cloth, \$2.50. New York, U.S.A.: D. Van Nostrand Company; Rochester, New York: Eastman Kodak Company, 1921.

Among the subjects in the science of photography that still puzzle some investigators and students, is the silver grain of photographic emulsions and their successive conversion during the development of the latent image and in its permanent fixation. In the above-mentioned work, which is the first of a series of monographs on the theory of photography, from the Research Laboratory of the Eastman Kodak Company, Rochester, the authors, Messrs. Trivelli and Sheppard, have applied their united abilities to the thorough study and analysis of the sensitive material used in the preparation of photographic dryplates; in other words, the scientific constituency of the emulsion. As a result of these investigations, the authors have treated this interesting subject in ten chapters:

The influence of ammonia on photographic emulsions and a theory of ripening.

Von Weimarn's theory and the determination of the dispersity of silver bromide precipitates.

Accessory factors influencing the dispersity of silver bromide emulsions.

Crystallisation catalysis.

Capillarity and crystalline growth.

Experimental study of the crystallisation of silver bromide.

The classification of silver halide crystals.

The silver bromide crystals of photo-emulsions.

The directions of most rapid growth in silver bromide crystals, and the occurrence of anomalous forms.

The behavior of silver bromide and silver iodobromide crystals in polarised light.

It is evident from the summary of the contents of this valuable work, that the student-photographer will be able to derive intelligent and accurate information on a topic that has no doubt interested him since he took up photography, but which, hitherto, he has not been given an opportunity fully to understand. We understand that the treatment of the silver bromide grain of photographic emulsions—the first of a valuable scientific series on photography—has been edited by Dr. C. E. Kenneth Mees and Mildred Spargo Schramm—which circumstance gives this work added importance and value.

AGENDA LUMIÈRE-JOUGLA, 1921. This interesting and useful French annual, issued by the Lumière and Jougla Works, at Lyons, France, with branch-offices at Paris, will appeal to photo-workers throughout the world. Although the medium is the French language, it can be understood readily by almost any educated person, because of the simplicity and correctness of its phraseology. Witness the introduction:

"Toutes les personnes qu'intéresse à un point quelconque la photographie connaissent cet ouvrage, *vade mecum* indispensable à ceux qui pratiquent cet art et qui ont pu apprécier les renseignements de toute nature qu'il renferme, renseignements devant faciliter leur tâche en même temps qu'éviter des tâtonnements ou des insuccès. Nous avons procédé cette année à une révision complète de tous ses chapitres et apporté de nombreuses modifications qui seront appréciées par tous nos lecteurs. Cet Agenda étant le leur, nous les prions de bien vouloir nous signaler les erreurs ou omissions que nous aurions pu commettre et dont nous tiendrons compte dans notre prochaine édition, les en remerciant à l'avance."

The annual begins with the history of the celebrated manufacturing-firm of Lumière, founded by M. Antoine Lumière (deceased, 1911, four years after his invention, with the aid of his two sons, of the Lumière Autochrome process) and which is united with the firm of Jougla, manufacturers of dryplates, photopapers, developers and other photo-chemical products, also studio-accessories, etc. The contents proper is divided into sections dealing with photographic processes, formulas, measurements and numerous tables for the various photographic methods in present-day use by photographers, and workers in all industries where photography plays a part. Much space, naturally, is devoted to the Autochrome process with all up-to-date modifications and improvements, in the successful making of Autochromes. Of course, many of the developing, printing and other photo-methods are specially applicable to the Lumière-Jougla products. This annual furthermore contains numerous recipes for making prints on surfaces other than paper, such as fabrics, glass, wood, leather and metals. Copies of this valuable annual, which is issued in a pocket-size edition, may be obtained from the publishers, Gauthier-Villars, 55, Quai des Grands-Augustins, Paris, France, at the stated price of four francs, although it may be best to forward eight francs to defray postage, etc.



RECENT PHOTO-PATENTS

Reported by NORMAN T. WHITAKER



THE following patents are reported exclusively for PHOTO-ERA MAGAZINE from the law-offices of Norman T. Whitaker, Whitaker Building, Washington, D.C., from whom copies of any one of the patents can be obtained by sending twenty-five cents in stamps. The patents mentioned below were issued from the United States Patent-Office during the month of May.

Patent, Number 1,377,249. Photographic-Printing Apparatus. William C. Huebner, Buffalo, N.Y., assignor to Huebner-Bleistein Patents Co., Buffalo, N.Y.

Patent, Number 1,377,250. Photographic-Printing Apparatus. William C. Huebner, Buffalo, N.Y., assignor to Huebner-Bleistein Patents Company, Buffalo, N.Y.

Between-the-Lens Photographic Shutter. Patent, Number 1,377,366. George F. Rose, Hyndsville, N.Y.

George C. Beidler of Rochester, N.Y., has been granted patent, Number 1,377,454, on Photographic and Developing Apparatus.

George C. Beidler of Rochester, N.Y., has been granted patent, Number 1,377,455, on Autographic Camera.

Patent, Number 1,377,887. Apparatus for the Developing of Films. Roscoe C. Hubbard of New York, N.Y.

Photographic-Printing Machine. Patent, Number 1,375,662, granted to Joseph Abel, of Washington, D.C.

John P. Bethke of Milwaukee, Wis., assignor of one-half to Louis Schlesinger of Milwaukee, Wis., has been granted patent, Number 1,375,814, on Method of Making Markings on Sensitized Material.

John P. Bethke of Milwaukee, Wis., assignor of one-half to Louis Schlesinger of Milwaukee, Wis., has been granted patent, Number 1,375,815, on Autographic Camera.

John B. Bethke of Milwaukee, Wis., has been granted patent, Number 1,375,816, on Autographic Camera.

Patent, Number 1,376,032. Means for Autographing Sensitized Photographic Material. John W. Ozols, Bridgeport, Conn.

Color-Photograph or Film and Method of Producing Same. Patent, Number 1,376,940. Frederick Eugene Ives of Philadelphia, Pa.

Patent, Number 1,376,946. Folding Camera. Robert Kroedel of Rochester, N.Y., assignor to Eastman Kodak Company, Rochester, N.Y., a corporation of New York.

Everett E. Sheldon of Philadelphia, Pa., has been granted patent, November, 1,377,009, on Photographic-Printing Machine.

Investing in Photo-Schemes

It is our duty to send out a warning—as we have done in years past—against investing in stock, offered by enterprising agents, purporting to be valuable photographic processes. At the present time the attention of those eagerly awaiting chances to get rich quick is invited to a very plausible printing-process in natural colors. The stock is sold at par with a positive promise of handsome returns. Samples of successful color-prints are shown, *but the process itself is not demonstrated.* Even if it were, by some dexterous

manipulator, it would not be proof positive of the success of the process, the integrity of the enterprise or the safety of the investment. Should, however, a reliable and easily-worked amateur printing-process in natural colors be put on the market, this magazine will surely endorse it.

Underexposure, which is more common than overexposure, and which is almost impossible to correct, need trouble photographers, especially snapshooters, no more. It has ceased to be a bugbear! Hereafter, one may photograph very dark interiors, by daylight only, in *less than one minute* and, by using a newly invented re-agent, develop such greatly underexposed plates with *full detail*. Indoor-portraits that require several seconds' exposure, can now be made successfully in a fraction of a second. Think of it! Such a boon is offered by a newly-organized concern in Ohio, *i.e.* you buy the company's stock, or the compound, and—*await developments!* A very original feature of this wonderful discovery is the claim made by the promoters that, contrary to the usual way, the shadows develop *first*, and with all detail, and then follow the highlights! They even offer negatives showing how an exposure of 1/100 second (ordinarily requiring 1/10 second or even more) has been developed with all originally visible detail by the aid of this new compound! And, strange to relate, many intelligent amateur-photographers have accepted such negatives as proof positive of the efficacy of the thing!

Far be it from PHOTO-ERA MAGAZINE to impede the march of scientific progress or discourage the inventive genius of these and other altruists, much less to dissuade impecunious photographers from investing in stock likely to yield them a much-coveted bank-account. The Publisher's duty is to ask his readers to be on their guard against smooth-tongued swindlers, although, some of them, it is true, are sincere, well-meaning persons and, themselves, believe thoroughly in the alleged merit of the stock they are offering.

When it comes to investing in securities whose principal is secure and whose dividends are inviting, and about which there can be no question, the Publisher of PHOTO-ERA is in a position to refer his subscribers and friends to a firm recognised in the financial world as reliable, and well-informed as to the conditions, activities and prospects of meritorious American enterprises. Although there are other brokers of equally high standing, the one PHOTO-ERA MAGAZINE has chosen to attend to the interests of its readers and friends, is known to the Editors personally through successfully conducted transactions. In these days, when most gilt-edged stocks are quoted away below par—a propitious time to buy—the conservative investor should consult a sound and recognised authority of the financial market.

Beyond the Age-Limit

MISS OLDUN—"Perhaps you are not aware that my family came over in the Mayflower."

MISS KEEN—"Indeed! But then, I suppose you were too young to remember much about the trip."

Exchange.



WITH THE TRADE



New Wollensak Shutters

WE are glad to call attention to a new line of Wollensak Shutters which incorporates a new and fundamentally different mechanical construction. The retarding-device which governs the shutter-speed has been changed radically and the uncertainty of air-pumps and complexity of gears has been eliminated. The result is extreme accuracy of automatic speeds and simplicity of construction, with no involved mechanism to get out of order. We are informed by the manufacturers, The Wollensak Optical Company, Rochester, New York, that this new line will replace the shutters listed in the current catalog. However, as there are four different grades—fifteen new shutters in all—it will be several months before the new line is ready in its entirety. New trade-names have been given to these shutters; the *Betar*, replaces the *Auto*; the *Gamma*, replaces the *Vieto*, and the *Delta*, replaces the *Ultr*. The manufacturers will be pleased to answer promptly all inquiries with regard to the new shutters.

N. Y. Institute of Photography

IN an attractive, illustrated catalog, "How to Become a Professional Photographer," the New York Institute of Photography, 141 West 36th Street, New York City, places before the reader an excellent discussion of the profession of photography as a life-work. To the man or woman who has not decided upon a definite vocation, this well-written brochure will offer many sound reasons in favor of photography as a dignified, profitable and interesting profession. Readers of PHOTOGRAPHY MAGAZINE may obtain a copy free of charge by writing to the secretary of the Institute.

Universal Motion-Picture Camera

MOTION-PICTURE photography for the average amateur or professional photographer has been a branch of photography that has required considerable technical experience and money to pursue to advantage. Some equipments, offered in the past at a moderate price, were mechanically imperfect and did not use standard motion-picture films. In short, it was proved conclusively, financially and practically, to a gullible public that a reliable, standard motion-picture camera could not be produced for less than five hundred dollars. Of course, there are motion-picture cameras on the market that cost many hundreds of dollars; but we take pleasure to say that after careful investigation we find that the Universal Motion-Picture Camera as manufactured and equipped by Burke & James, Inc., 240 East Ontario St., Chicago, is a camera that is technically and mechanically sound; and costs enough to ensure the best of material and workmanship. The U. S. Government, large motion-picture producers, manufacturers, lecturers and amateur and professional photographers recommend the Universal after exhaustive tests and practical experience with it in all parts of the world.

A well-written and illustrated catalog, "Motion-Photography With the Universal Camera," is ready for distribution; and, after a careful reading of this interesting brochure we can recommend it to the attention of our readers who wish to obtain concise technical information with regard to motion-picture photography. There is an explanation of terms and a complete description of the Universal Camera, projectors and accessories. The well-known Goerz Dissolve and Trick-Exposure Devices are listed in connection with the Universal Camera. All inquiries will receive prompt attention from the manufacturers.

Meteor L. C. H. Vials

THERE are many of us who will recall our early days in photography when we snatched a few hours after a busy day to develop and print pictures. We can recall the familiar M.Q. tubes that we purchased and whose contents took an interminable time to dissolve. In an evening that was all too short for developing, fixing and washing, the many minutes wasted waiting for the granite-like particles in the M.Q. tube to dissolve seemed like so many hours. Those who remember such experiences will be interested in the new Meteor L. C. H. Vials manufactured by John G. Marshall, 1752 Atlantic Avenue, Brooklyn, New York. These vials contain a measured quantity of extremely concentrated Cyntol (Metol)-Hydroquinone developer to which a specified quantity of water is added and the developer is then ready for immediate use. These vials may be obtained from photographic dealers or direct from the manufacturer who will be glad to give all inquiries his best attention.

Keeping-Quality of Plates in the Tropics

ACCORDING to Mr. John J. Bushell, a correspondent in Bermuda who writes to *The British Journal*, the keeping-quality of some Lumière Violet Label plates is worthy of record. These plates were imported by Mr. Bushell several years before the war, but only recently exposed and developed. The results were satisfactory in every way. In view of the hot, damp climate of the West Indies during the greater part of the year, he considers that this is an eloquent tribute to the keeping-qualities of the plate. Upon verifying the batch-number on the box, it was found that the plates were manufactured about April, 1912!

Adam Archinal, Agent for Plaubel Lenses

THOSE of our readers who are interested in high-grade, imported photographic equipment will do well to send for a little booklet issued by Adam Archinal, 1409 Broadway, New York City, the U. S. Agent for Plaubel lenses and cameras. The complete line comprises about ten types of lenses, nine models of cameras and other optical goods. The advanced amateur will find a number of exclusive features in Plaubel products. All inquiries directed to the importer will receive prompt attention.

Wollensak World

PUBLISHED BY THE
WOLLENSAK OPTICAL COMPANY
ROCHESTER, NEW YORK

DEVOTED TO
LENS AND SHUTTER
INFORMATION

Vol. I

JULY, 1921

No. 7

NEW WOLLENSAK SHUTTERS OF REMARKABLE SIMPLICITY AND EXTREME ACCURACY



Note the unusual simplicity of mechanical parts. The little wheel shown at the bottom is not a gear but an escapement wheel that makes only a partial revolution.

MAKE YOUR CAMERA 100% EFFICIENT

You can secure one of the new type shutters with a Wollensak Series V Anastigmat F7.5 Lens at a surprisingly moderate cost. This outfit will give you the advantages of accuracy that the new shutter offers, plus the fine definition obtainable with this popular anastigmat.

There is no charge for fitting the lens and shutter to your camera and where special focusing scales are needed the cost is only 75c extra.

The Series V in Gammax Shutter (with speeds of 1-100th, 1-50th, 1-25th and 1-5th) costs \$11.00 in the $3\frac{1}{4} \times 5\frac{1}{2}$ size; \$10.00 in the $3\frac{1}{4} \times 4\frac{1}{4}$ size, with other sizes proportionate in price.

See your dealer to-day, and have him send in your camera to be fitted with this attractive outfit.

FOUND IN THE FINDER

YOUR CAMERA is only as good as its lens. Make sure the lens is right.



"MADE IN U.S.A." Does that mean anything more to you than an expression of place or origin? Wollensak lenses are American-made.



"COMMERCIAL LENSES" is the title of a new leaflet now ready. While particularly intended for the commercial photographer, it will be sent on request to anyone interested.



OUR SLOGAN and our policy is to "Let the user judge."



AND THIS is a user's judgment: "I have used all the soft-focus lenses on the market, but the dear old Verito is the apple of my eye."



WE MAKE good friends by making good lenses.

Betax, Gammax and Deltax incorporate new mechanical principle

A new line of Wollensak Shutters has been perfected—a line fundamentally different in mechanical construction, having an accuracy of speeds heretofore unobtainable.

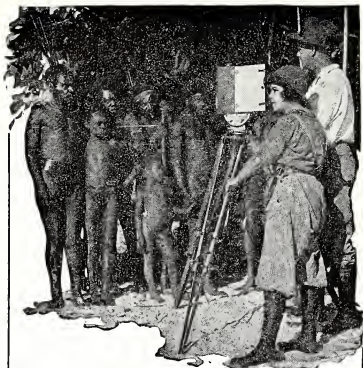
In the new shutters air pumps and complex gears have been eliminated. Because of simplicity in the new construction, there is no involved mechanism to get out of order and with the new retarding device (an exclusive feature) extreme accuracy of speeds is certain.

There are three new models, the Betax, Gammax and Deltax, which respectively replace the Auto, Vioto and Ultro listed in the current Wollensak catalog. The Betax as illustrated has six speeds, besides T and B; the Gammax, four, the Deltax, three.

In buying hand or film cameras or a lens with shutter, insist on a new model Wollensak. It will insure complete satisfaction in your pictures.

Further information upon request.

BetaX, GammaX, DeltaX, — the "X" signifies Xposure.



A Noted Explorer

making motion-pictures of South Sea cannibals with the **UNIVERSAL** camera. Anyone who can take ordinary "snap-shots" can make first-class motion-pictures with the famous

UNIVERSAL MOTION PICTURE CAMERA

This camera takes standard-size film. It has every device and attachment necessary for making the finest possible pictures.

Explorers, travelers, scientists, industrial and news-photographers and the U. S. Army use the **UNIVERSAL** because it is highly efficient, compact in size, strong in construction, light in weight and reasonably priced.

Free Motion-Picture Book

Write for our book "Motion-Photography." It tells how to make motion-pictures. Gives exposure-tables. Hints on composition. Full details of construction and operation. Particulars of portable and semi-portable motion-picture projectors. It is sent free on request.



Burke & James Inc

Manufacturers of Rexo Cameras, Film, Paper,
and Universal Motion Picture Cameras
264 East Ontario Street, Chicago, Ill.
Distributors in Principal Cities

GRIPPIT

Grippit is the adhesive which **cannot wrinkle** or curl your prints.

But Grippit has scores of other uses. Try it for mending a torn camera-case, for patching a canoe, for mounting specimens, or for repairing an inner-tube.

Waterproof, flexible, stainless.

For sale by all photo-supply dealers.
25c. in tubes or \$1.50 in pint-cans.

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Grippit
Sticks it

In addition to the general line of merchandise of a well-stocked photographic department, we carry many lines of specialties, also new items both foreign and domestic.

Burroughs & Wellcomes Tabloid Products

Paget the famous
Self-Toning Paper

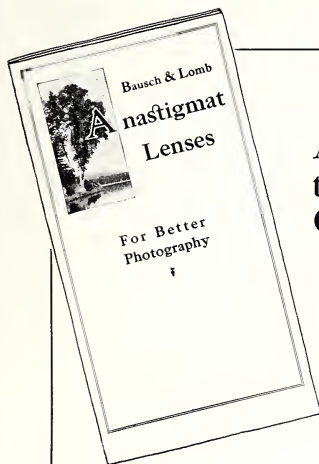
The New Carbine Roll-Film
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(No bothersome apron)

Johnson & Sons Chemicals
Featuring *Activol*—the Universal Developer

Stereoscopic Supplies

45 x 17 mm. 6 x 13 cm.
Both Negative and Positive Plates

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BOSTON, MASS.
(TWO STORES)
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A Key to Better Camera-Results

YOU are going to make a great many pictures this summer. Will you be proud to show them, or apologetic?

That will depend more on your lens than you may realize. If not already familiar with the advantages offered by

Bausch & Lomb Anastigmat Lenses

This new, 12-page folder, illustrated above, will interest you. It will tell you briefly but clearly what anastigmats are and in just what points they excel ordinary lenses. It will also give you prices and specifications of our famous TESSAR and PROTAR series, as well as typical specimen-reproductions of their work.

Write for a copy of this folder today. It may guide you to a happier summer with your camera.

BAUSCH & LOMB OPTICAL COMPANY

622 St. Paul Street, Rochester, N.Y.

NEW YORK

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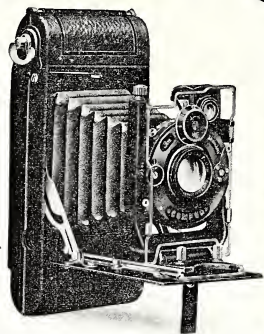
WASHINGTON

LONDON

Leading American Makers of Photographic Lenses, Microscopes, Projection Apparatus (Balopticons), Ophthalmic Lenses and Instruments, Photo-micrographic Apparatus, Range-Finders and Gun-Sights for Army and Navy, Searchlight-Reflectors, Stereo-Prism Binoculars, Magnifiers and other high-grade Optical Products.



When Ordering Goods Remember the PHOTO-ERA Guaranty



Icarette D

For roll films $2\frac{1}{2} \times 4\frac{1}{4}$ in.

A picture-making instrument of such superiority that the name camera fails to do it justice.

Incorporated in its design are many unusual features—details which help to make picture-taking a pleasure.

Its Carl Zeiss Lens f4.5 is an all-weather objective, and its Compur Shutter adds to its high speed capabilities. Its compactness, sturdy construction, Iconometer finder— all help to make it the greatest improvement in camera design since the introduction of its smaller brother, the Icarette C, some years ago.

Ask your dealer about the Icarette D, or write us for the Ica catalogue.

Harold M. Bennett

U. S. Agent

110 East 23rd St., New York

Wellington

Bromide Papers

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Grades in white and cream tints for all negatives and all effects.

Sample package containing 12 different grades mailed to any address on receipt of \$1.25.

Complete Wellington Price-List sent on request.

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**THE RIGHT START FOR
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It takes a "Special Extra-Fast Youngster"
to beat a

HAMMER PLATE!

That's why, for child-portraiture,
Hammer Plates are indispensable.
Special brands for special needs.

Hammer's Special Extra-Fast (red label) and
Extra-Fast (blue label) Plates for field- and
studio-work, and Hammer's Extra-Fast Ortho-
chromatic and D. C. Orthochromatic Plates
for color-values.



HAMMER DRY-PLATE COMPANY

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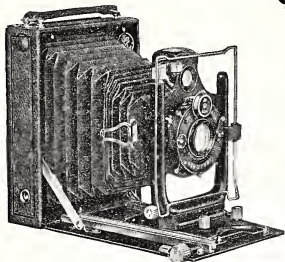
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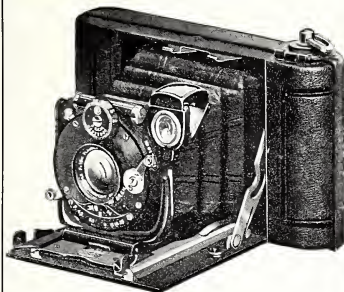
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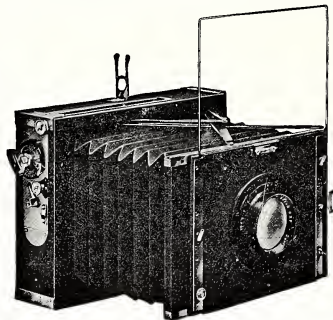
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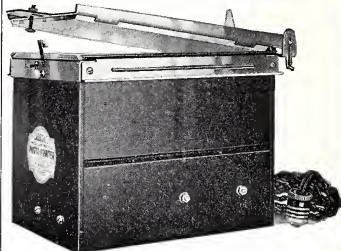
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PHOTO-ERA MAGAZINE

The American Journal of Photography

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No. 2

A Pilgrimage to Wolfeboro, New Hampshire

In Two Parts

HERBERT B. TURNER and RALPH OSBORNE



WITHOUT doubt, New England is the most popular summer-playground east of the Rocky Mountains. It has an atmosphere distinctly its own, a charm about it that reminds one strongly of England in its vivid greenness, its well-groomed prosperous towns, its rich foliage and, for the most part, its fine motor-roads. New England scenery is kindly, and, as Henry James would have put it, "sweet pretty." Sprinkled through its states in cities, towns and the beauty-spots are caravansaries that are all that can be desired.

Maine, with its vast forests, its lakes and streams, its charmingly diversified farming-country, its pleasant towns, its rocky but ever-green coast-line dotted by inviting islands, makes an ideal summer-vacation land for the thousands who visit it yearly to escape from the heat of the west and south.

New Hampshire, with its White Mountain range, its superb lakes lying among green hills and mountains, its delightful pastoral landscapes dotted by trim, neat farms, homesteads, charming villages and towns, closely rivals Maine in popularity.

Vermont, to the writers at least, is one of the Mecca-spots of the New England states, although not so well known to the vacationists as it should be. It has some of the charming qualities of Central France from a scenic point of view, lacking, of course, as all America lacks, those delightful, mediæval towns with their picturesque architecture. Vermont is, indeed, a kindly, pretty state, teeming with inviting towns set in a frame of vivid green, with pleasant mountains, graceful streams and a few lovely lakes of which Lake Willoughby, near the Canadian border, surpasses anything we have in the East.

Massachusetts can boast of historic shrines that have a personality all their own. Its coastline is dotted by old seaport-towns that figure largely in the story of America. The famous North Shore drive from Boston to Gloucester is without a rival in beauty and architecture in this country. The South Shore drive by the way of Cohasset, Marshfield, Plymouth and along Cape Cod to Provincetown is one of great charm. Boston is a city of distinction, almost English in aspect, a center of learning, filled with historic and literary association, and a town beautiful among American cities. The Berkshire district offers the tourist and rest-seekers a haven of delight in great rolling hills, in landscapes thickly robed in vegetation of which the massive, graceful elm-trees form not the least of attractions, and in towns that are all that America can boast of in neatness, in setting and architecture. Of Stockbridge, Great Barrington, Lenox, Pittsfield and beautiful Williamstown, set as they are amid the Berkshire Hills, Massachusetts can well be proud.

Rhode Island and Connecticut have charms that are well worth exploring for the seeker after the beautiful.

Such, then, is an all too brief summing-up of the attractions of New England.

This is the story of a couple of camera-devotees who, in May while the foliage was at its best, decided to make a short motor-trip from picturesque old Boston to the Lake Umbagog district in central New Hampshire and to visit Mr. A. H. Beardsley, the present publisher of PHOTO-ERA MAGAZINE, and to see the new home of that publication.

Mr. Beardsley, on account of what the influenza bestowed upon him—a touch of chronic pleurisy—had to find a haven from the east-



OLD EMERSON HOUSE, IPSWICH, MASS.

TURNER AND OSBORNE

wind, so prevalent along the New England coast. In Wolfeboro he has found it. Dr. Wilfred A. French, finding as the years roll by, that he desired more time for hitherto neglected interests and knowing that in Mr. Beardsley he had a man of proved executive ability who would maintain the high standard of PHOTO-ERA MAGAZINE, made him a proposition that was accepted. Thus the ownership has changed, and the business-management and much of the editorial work are carried on in the charming lakeside-town of Wolfeboro, while Dr. French, from the Boston office, acts as adviser and managing-editor, also continuing his personally created departments.

Lake Winnepesaukee may be reached by two or more routes from Boston of nearly the same mileage. We elected to follow the New England shore as far as Portsmouth, New Hampshire, and then strike inland to the lake. Leaving Boston, a short three-mile drive brought us to Harvard Square, Cambridge, which is flanked on one side by Harvard University, a number of the buildings of which are of delightful Colonial architecture, the oldest being Massachusetts Hall dating from 1720 and used to quarter troops during the Revolution. Almost directly across the street from Massachusetts Hall is Cambridge

Common, which was covered with the first American barracks at the beginning of the Revolution.

Under an ancient elm-tree, still standing hard by the Common, Washington took first command of the American army. Cambridge will furnish much pictorial material to the man with a camera, if he will take the trouble to seek it. Brattle Street with its historic estates, among them the Craigie House, which was Washington's headquarters and afterwards Longfellow's home until his death, will be of special interest to the photographer. Harvard University also offers many pleasing views.

Leaving Harvard Square, we motored through rather uninteresting Somerville to the Revere Boulevard on the farther side of the town. Here we sped on past a part of Chelsea to Revere Beach with its great stretch of sand and water, flanked by the ugly "Concy Island" amusement-contraptions so prevalent along American beaches. It has always seemed strange to us, that we Americans delight to mar the beauty of such places with such resorts instead of beautifying them with noble buildings and landscape-gardening, as in Europe. However, after a mile or two we were clear of these eye-sores and soon reached the City of Lynn. Here we came upon another beach stretching to Swampscott, a one-

mile run, that is beautified by a noble sea-wall at one side, and pleasing residences at the other. Ledges break up the stretch of sand, here and there, and a few miles seaward a rock-island with a lighthouse gives an accent to the very charming seascape. Five miles more of good road brought us to old Salem, the American home of witchcraft, the birthplace of Nathaniel Hawthorne, and, after Plymouth, the oldest permanent settlement in New England, dating from 1626. Salem offers to the photographer much material in the

the fields abloom with flowering weeds, great stretch of white and yellow blossoms carpeting the fields setting off charmingly the great English elms, oaks and maples, as well as the many fine residences. Entering the old town of Ipswich, at thirty-six miles, we were again in one of the oldest sections of New England, for it dates from 1634. Here are numerous venerable, picturesque houses, and a charming, winding river spanned by a bridge or two that called for a halt that we might use our cameras. A typical village-green



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way of fine, old historic houses and many beautiful Colonial doorways.

A *détour* of about three miles to the east from Salem will land the motorist in very quaint Marblehead, nearly as old as Salem, now noted as a yachting-center and a summer-resort. To do Marblehead justice, would take an entire magazine-article, so we shall leave it for another time.

Crossing over the Danvers River from Salem we found ourselves in the city of Beverly, twenty-five miles from Boston. Beverly is a busy little place from which the famous North Shore Drive branches off to Gloucester. We continued northward, entering an ever-increasing pictorial land,

is in the center of the town, and tree-arched roads give it quality and dignity.

Speeding on, we came to Rowley before we realised it and passing it by, at forty-three miles, we entered Newbury Old Town—a very pretty village dating from 1635. The tree-arched Main Street has some very interesting Colonial houses, one of which we could not resist photographing. Two and a half miles from Newbury Old Town we entered the city of Newburyport, containing also many beautiful mansions that date from Colonial times. Oliver Wendell Holmes wrote some half century ago of Newburyport and Portsmouth, "They both have grand old recollections to fall back upon—times when they looked



TOLL-GATE ON THE PISCATAQUA

TURNER AND OSBORNE

forward to commercial greatness, and when the portly gentlemen in cocked hats, who built their now decaying wharves and sent out ships all over the world, dreamed that their fast-growing port was to be the Tyre or the Carthage of the rich British colony." Newburyport was the home of that eccentric genius, "Lord" Timothy Dexter, who sent warming-pans to the West Indies and won out on the venture. His rather remarkable house is one of the city's show-places. It was the birth-place of William Lloyd Garrison, also the home of George Whitefield, the great revivalist, and other notable persons.

From Newburyport, we crossed the Merrimack over a long, ugly bridge and, coming to Salisbury, turned right and soon reached Salisbury Beach with its collection of dreadful amusement-resorts facing a superb stretch of sand. Here the route turned north again, following the shoreline to Portsmouth. Shortly after leaving Salisbury Beach, we entered the state of New Hampshire, coming first to Hampton Beach with its many summer-cottages, hotels and amusement-places, not very attractive to the pictorialist, but having another wonderful stretch of sand and sea. Soon the attractive headland, known

as Little Boar's Head, came in sight with its fine collection of summer-mansions set in extensive grounds abloom with brilliant flowering shrubs and plants. Flowers that grow near the sea always seem to have more color than elsewhere. From Little Boar's Head one looks down upon a very blue sea and far out to the Isles of Shoals, an island summer-colony seen dimly in the distance. At Rye Beach, a mile beyond, our machine registered sixty-three miles. Rye Beach, luxuriant in vegetation, shaded by noble trees, with its fine golf-course, its pleasant homes, sumptuous hotels, and beautiful bathing-beach unblemished by merry-go-rounds and such like, is one of the beauty-spots of the New England coast-line. Still following close to the sea, we motored on past summer-resorts until within a few miles of Portsmouth, when we turned inland to enter the city at seventy-three miles on the route from Boston that we had been following.

As we entered Portsmouth, our thoughts turned back a hundred and fifty years to the time when this was one of the most important towns along the coast, and the harbor and docks were filled with square-rigged ships; for the merchants of Portsmouth, like those of Salem, carried on a



OUR FIRST GLIMPSE OF THE SEA

TURNER AND OSBORNE

vast trade with the far East. However, the beautiful houses built at that time are all that is now left to remind one of the commercial supremacy of Portsmouth.

Among the best examples of architecture of this time are the Langdon house, in Middle Street, and the Athenæum on the Parade, both of which were built by the famous architect, Bulfinch, who designed so many buildings in Boston, including the State House.

The wood-carving of the interior of the house, particularly in the hall and on the stairway, is extremely fine. The house is considered by architects one of the most interesting of its kind in America.

Perhaps, however, the finest house of this period is the one built shortly after the Revolutionary War by Governor John Langdon. It is truly a noble structure, in perfect preservation, and is a model of Revolutionary architecture.



A ROADSIDE WATERHOLE

TURNER AND OSBORNE

In Daniel Street we stopped to photograph the Warner House, built by Colonel McPhaedris and occupied as a residence in 1753 by Benning Wentworth, the second Royal Governor of New Hampshire. This is the first brick house in Portsmouth, the interior of which is very beautifully paneled. The lightning-rods, which are still on the house, were installed by Benjamin Franklin, and it contains a Franklin stove that the inventor himself placed there.

The Moffatt-Ladd house on Market Street, now used as the home of the New Hampshire Society of Colonial Dames, was built by John Moffatt in 1761 and was occupied by Gen. Wm. Whipple, a signer of the Declaration of Independence, who married Mr. Moffatt's daughter.

Another very interesting house is situated next the Rockingham House, on the corner of State and Middle Streets. In this house lived John Paul Jones, while he superintended the building of the ship of the line, "America," in the Navy Yard across the river, and which he had every reason to believe he himself would command. This ship was, however, given by the Continental Government to the French, to make good the loss of their ship of the line, "Magnifique," which was wrecked on our coast. On one of the window-panes of this house John Paul Jones has inscribed his name with a diamond.

Many were the record-pictures we made of this dignified old town, until the inner man began to warn us that the luncheon-hour had arrived.



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No self-respecting motorist-photographer would think of leaving Portsmouth without first indulging in a broiled live lobster at Ham's, nor did we, and ample was the justice done to the deliciously cooked crustacean. Thus well fortified for the remaining miles that still separated us from our journey's end, we once again set gaily off, ever watchful for a chance-picture, and stopping now and again to make an exposure of some thing which called us too strongly not to pass by.

It was with genuine regret that we left Ports-

a picture here, but succeeded only in obtaining a record.

As we crossed this bridge, we wondered if it was the one Mr. Eliphalet Ladd, a prominent Portsmouth merchant of Revolutionary days, caused to be chopped down, because the draw was too narrow to admit the passage of one of his ships, arguing that he was perfectly in the right, as such a narrow draw was an obstruction to navigation.

We sped along the "Granite Way" which is the direct road to the White Mountains, ever



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mouth with its myriad opportunities, both historical and pictorial. But time pressed, so we took the road for Dover and, after five miles, came to a quaint, old toll-bridge, where we paid fifteen cents before we were allowed to cross. It seems strange that one may not leave Portsmouth for points north, without paying toll at one of the two bridges which span the Piscataqua at this point: the one which crosses over into the state of Maine being owned and controlled by the Boston & Maine Railroad, whereas the one leading north in New Hampshire and over which we crossed, is the property of a local railroad. It really seems a very near relic of the past, and one which is a surprise to come upon. We essayed

watchful for pictures and finding a goodly number, although in general we encountered the great difficulty so prevalent in our New England landscapes, namely, there is too much in it. Of course, that which is unessential can often be eliminated. In other countries, however, one comes across a single tree or clump of trees that composes well, whereas, here, that tree or clump will be so surrounded by other trees as to make a veritable forest. In other words, we found the profusion of vegetation rather a detriment than an aid to our pictorial quest.

The road we should have followed passed through Dover, Rochester, Milton, and at Sanbornville we should have left the White Moun-

tain road for a twelve-mile stretch of a not too impossible sandy road which leads directly to Wolfboro. However, at Rochester, not knowing just which road to take, we asked the way to Wolfboro of a small boy. He, nothing loath and with evident good will to indicate the shortest route, told us to take the first turning to the left. Let us state firmly, however, that here our trust in small boys was violently shaken. Although the road indicated may have been the shortest, it certainly was the worst stretch of road, particularly beyond Farmington, that we have ever had the misfortune to pass over. The path, it

It is a long lane that has no turning, and we finally rolled into the outskirts of Wolfboro. On the edge of the road, as we entered the town, we noticed and stopped to photograph a superb elm-tree, known locally as the "Feather-Duster," and it, indeed, resembled that household-commodity in its remarkable symmetry.

Mr. Beardsley gave us a right royal welcome, and we were soon settled in the delightful quarters which were to be our home for the next three days. There was, at this hour, a particularly fine view across the lake and we chose the steps of the Brewster Free Academy—a fine building



A LAKE WINNEPESAUKEE VISTA

TURNER AND OSBORNE

was little else, was one of those affairs composed of three ruts, the two outside ones for the wheels and the middle one for the horse. Over this abomination we bumped and jolted and swayed and jounced for nineteen of the longest miles it has ever been our fate to travel. We learned afterwards, in Wolfboro, that it was called the "Tumble Down Dick" road, and we voted then and there that it was admirably named.

We were particularly struck by the number of deserted farms we passed, for it seemed that hardly more than every fourth farm was inhabited. Perhaps, the terrors of riding over this road had frightened them away. If, indeed, this should be the case, we really cannot blame them for seeking pastures new.

just back of Mr. Beardsley's house—as our vantage-point to set up our cameras. We found, however, that another photographer had arrived there before us, and with a Cirkut camera. We held a hasty consultation as to the advisability of knocking him down and taking his Cirkut from him; for only with such an equipment could justice be done to the beautiful stretch of lake, mountain and sky. However, we decided to remain within the law, and did the best we could with the equipment at our disposal. Turner used a 5 x 7 view-camera and a nineteen-inch lens which gave very much the same view as seen with the eye. A lesser focal length on these "long shots" is quite inadequate.

We returned across the Campus, on the edge



A LAKESIDE FARM
AN OLD HOMESTEAD
TURNER AND OSBORNE

of which is situated Mr. Beardsley's house, and found him in the act of photographing the Academy's ball team, a husky set of lads, who, it is understood, put up an excellent game of ball. From the veranda, after a delicious supper, we watched the setting sun and tried to figure out what the weather was to be on the morrow. The indications were not favorable.

As we feared, the next day dawned cloudy and lowering. Nevertheless, as our time was short, we started out by motor to explore the road to the north and east of the lake, under the able guidance of Captain Beardsley, our amiable host's father.

Here we had a chance to better see and admire Wolfeboro with its pretty streets lined with

trees, well-kept houses and grounds, and its general air of prosperity. Last August, Wolfeboro celebrated its one hundred and fiftieth anniversary, the population now being about twenty-five hundred. Built like most other small New England towns, there is one main street, about two miles long, from which other streets lead. Here, however, the streets can lead only towards the east, for the town lies directly on the eastern shore of Lake Winnepesaukee. There is a very good hotel and many excellent boarding-houses, and not a few of the private families have a room or two for the use of the summer-guest. In fact, Wolfeboro is ideally situated for the vacationist.

(END OF PART I)

Base-Ball Photography

LEONARD C. LEE, Jr.



F all the various summer sports in the United States, none is better adapted to photography than baseball. In every city, town or village—large or small—may be found a baseball-team. A close play on the bases may be photographed as well when the uniform of the player is lettered, "The Sand-Lot Terrors," as when it spells, "New York Giants." For that matter, the small-town photographer is usually better off in—and on—the field of baseball than the city-amateur; for the former can usually get nearer to the players and to the bases.

This article will appear during the baseball-season. July and August are the best months in the year for baseball-photography. In the first place, the light is excellent and the days are long. Secondly, the game of baseball is at its best during these months; for the teams are in full swing. Also, the photographer who finds the light poor can return the next day; for most plays occur over and over again, and the camerist is not forced to work under adverse conditions.

There are two kinds of baseball-photographs. The posed pictures, made during practice; and the others, made during the game. The first are of use only as records; they have a news-value, but are of no great interest. The subject, in these cases, and not the photograph, is the primary object of interest. However, some workers may wish to add a few photographs of this type to their collections, therefore I shall outline briefly some of the favorite poses.

In the first place, study the subject. If he is a pitcher, photograph him pitching. The best time to photograph a pitcher is either when his

hands are above his head in the "wind-up" or the moment after he releases the ball in his forward motion. I prefer the latter, for it shows the pitcher in his characteristic pose, gives a good view of the face—which is of importance in a "record" or "news" photograph—and shows any peculiarity the pitcher may have when he is throwing. A photograph from behind is sometimes of interest; but a position about twenty to thirty-five feet away from, and about ten feet in front of, the pitcher is best. The illustration "Brooklyn Pitchers Warming-Up, N. Y. Polo Grounds," shows this latter method fairly well. However, the background is troublesome; and this is one ever-present bother. The big-league pitchers always want to be photographed "as is"; and there are invariably people or signs close behind, as in the illustration. As for exposure, 1/150 second to 1/350 second with lens at F/4.5 or F/6.3, is ample to show arms, feet, and fingers clearly cut; but this shutter-speed will not, of course, stop the motion of the ball. To do this, one must have a focal-plane shutter; and 1/1000 second is none too quick to stop a "fast" ball, as may be seen from the illustration, "The Heavy Hitter." The exposure here was 1/600 second; but I stood rather close to the batter. At a distance of twenty feet, the ball would have been stopped at this speed. These exposures, ranging from 1/75 second to 1/200 second, are the best for all "posed" pictures. Outfielders should be made catching or throwing a ball. An excellent pose shows an outfielder or a baseman reaching for a high one. And here let me insert a word of caution. It is better to have the ball actually thrown to the fielder, and caught by him, than



BROOKLYN PITCHERS WARMING-UP
 CRACK!
 LEONARD C. LEE, JR.



THE HEAVY HITTER

LEONARD C. LEE, JR.

to have him stand, stork-fashion, on one leg, with a ball gripped in his glove. The first method may mean making the picture three or four times; but in the end, you will have a good one. The second way always looks "posed," and one good baseball-picture is worth twenty mediocre ones. A first baseman may be photographed to advantage by having some one bat or throw "grounders" to him, so that the picture will show him "stretching" after a wide one, while keeping one foot on the bag. Other basemen may be photographed catching "flies," fielding grounders, or throwing. The same distances and exposures as given for pitchers hold true here. A catcher may best be made during actual play, while a batter is up. Make the picture as the batter reaches the middle of the swing. If you want to stop the bat and the ball, a focal-plane shutter, driven at high speed, will be necessary. The picture "Crack!" was made as the bat met the ball for a "three-bagger." The ball was far out of sight by the time the shutter snapped. The batter is in the middle of his "follow through"

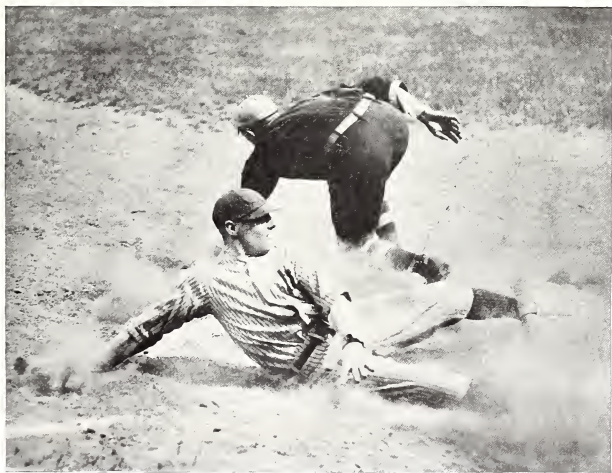
and the catcher's hands are awaiting the ball which has just been hit. This is the best way to photograph a batter, unless the face is of paramount importance. In that case, you must stand almost on the third-base line, for a "lefty," and on the first-base line for a right-hander, for most batters twist their heads and shoulders after their swing until they face third or first. The photographer had better be ready to "duck," too; for a fast drive down the base-paths is not an infrequent occurrence. The writer once had his head buried in the hood of a Press Graflex, ready to snap the batter, when he heard—or rather felt—two crashes in quick succession. The first was when the bat hit the ball, the second was when the ball hit the Graflex. So be ready to dodge at short notice, if you make pictures on the base-lines.

We now come to the most interesting part of this branch of photography,—making pictures during the actual game. There are two types of pictures. One is the news-photograph which may be made from an upper-tier box-seat, or from the

lower stand, back of third or first base. An illustration of this type, made at random, from Christy Mathewson's "Pitching in a Pinch," has the title, "Mathewson throwing out Baker at first, 1st inning, 2nd game, 1913 World's Series," and shows the whole infield made from above. This is pure record-work, and we are not concerned with this. An exposure of 1/100 second is ample at one hundred feet distance for this type of picture.

To obtain the second kind of pictures, during a game, get on the field! Do it by hook or by crook;

is best for virtually all of these pictures. It does no harm, but does good, in fact, to have the background out of focus, thus centering interest on the foreground. The distance from base in all these and later figures, should be such that you get an image about one- and one-half inches in height on the plate. This is an important factor. For larger images, speed up. A focal-plane shutter is a great convenience. If you have none you can get excellent results by being willing to move away and accept small, though sharp, figures, which later may be enlarged. For those



SAFE AT THIRD!

LEONARD C. LEE, JR.

but do it. You will not get anything but midget-sized figures, even from the best box-seats in the stand. The three places where photographs may be obtained are at first base, third and the plate. Second base is too far away for anything but telephoto-work. A few photographs at first base will be enough; for nearly all pictures there are alike, for the runner never slides. An exposure of from 1/50 second—at an angle to the runner of about fifteen degrees—up to 1/150 second—when at right angles—will give good pictures. Of course, it is understood that these, and later, figures, do not attempt to include the ball in the picture. A speed of F/6.3, or better still, F/4.5,

who use a between-the-lens shutter, invaluable tables and hints may be found in Photo-Miniature, No. 161, "Sports and the Camera," and in the little booklet that comes with the Harvey Exposure-Meter.

Returning once more to the base-lines, we will suppose that we have photographed our quota at first base, and are now looking for "new kingdoms to conquer." Let us move to the home-plate. A play at home-plate makes the best baseball-picture, and is the hardest to get. Either the umpire gets in front of you, or the batter gets in the way; and, to add to these troubles, there is usually about one play at home-



THE FALLAWAY SLIDE
NOT QUITE!
LEONARD C. LEE, JR.

plate during a game. This play is worth getting, I admit, but it is a difficult undertaking. For some good examples of this type of photography—you notice that I have none, not having the patience of Job—read “Pitching in a Pinch” referred to before. It contains some excellent photographs by Van Oeyen, of Cleveland. However, if you are patient, you may obtain one. I do not believe that any one ever got two good photographs at the home-plate during one game. The same rules that appear later for third-base work apply here. I prefer to move on to that best

to have the runner's feet slightly blurred, as otherwise the picture may appear “faked.” I have a photograph made on a grass-infield, in which the runner appears to be sitting on the grass, watching the third baseman fumble the ball. He is “too sharp,” and there is no dust. Dust is always of help in an action-picture, in small quantities. When one is photographing at third base, not only can a runner be made coming from second to third base; but, if the runner takes too long a lead, the pitcher throws over, and the runner dives back to safety. Two of the



BACK IN TIME

LEONARD C. LEE, JR.

place of all, third base. Here is the ideal position. There are usually at least four or five good plays and slides at third base during a game; and good photographs of the third baseman, pitcher and the short-stop in action may be obtained. First, get a tripod. No, not for time-exposures; but it is much easier to focus, set the camera on the tripod and “let ‘er set,” than it is to stand up and hold the camera. If you stand about twenty feet away from the bag, and use a $3\frac{1}{4}$ by $4\frac{1}{4}$ plate, you should get the runner no matter where and how he slides. The illustrations show this better than I can tell it. Incidentally, if you are using a reflex or Graflex, do not watch the runner on the groundglass. Focus, set the camera on tripod, and watch from “outside.” Most players slide on the “outside” of the bag, using the “hook.” It does no harm

illustrations are of this type. In one, “Not Quite!” the pitcher threw over to third, in the other the catcher threw down to the base. In both cases, as may be seen, the runners were safe. In “The Fallaway Slide” the catcher threw low to the third baseman, the runner, stealing from second, was safe. This photograph shows where the dust is of advantage, for it shows motion. In “Safe at Third,” the runner was caught between bases, the second baseman threw low to the third baseman, who dove for the ball, as the runner slid around him into the bag. The camera, of course, had been focused previously on the bag, and placed on a tripod. All that I had to do was to “press the button.” Incidentally, a little thing called the Optipod is very useful in this kind of work, as the camera may be swung to any position without moving the tripod.



"TO SECOND!"

EDWARD C. DAY

Lastly, all the illustrations, except "Brooklyn Pitchers Warming-Up," were made during actual play, three at the Polo Grounds, two at a summer-camp, and one at Van Cortlandt Park. The data follows:

"Safe at Third!"; July; bright sun; $3\frac{1}{4} \times 4\frac{1}{4}$ Graflex, Graflex Roll-Film; Wollensak Velostigmat Series II; stop, F/4.5; $1/440$ second.

"The Fallaway Slide"; $1/350$ second; other data same. "Not Quite!"; $1/440$ second; same as others. "Back in Time"; same as above.

"Crack!"; August; bright sun, same camera and lens, Seed Graflex Plate; $1/350$ second.

"The Heavy Hitter"; $1/600$ second, same camera and day as above.

"Brooklyn Pitchers Warming-Up," June; $1/200$ second; stop, F 6.3; Seed Graflex Plate.

All the pictures were developed in the following,—from "Seed Plates," Eastman Kodak Company—and printed on Velox Glossy.

CONTRAST DEVELOPER.

A.

Water	32 ozs.
Eloxy	35 grs.

E. K. Co. Sulphite of Soda	1 oz.
Hydroquinone	130 grs.
E. K. Co. Carbonate of Soda	800 grs.

B.

Water	16 ozs.
Potass. Metabisulphite	70 grs.
Potass. Bromide	20 grs.
Pyro	1 oz.

For use, take 4 ozs. A. $\frac{1}{2}$ oz. of B. Do not add water for speed-development. This developer is excellent when contrast is needed.

To sum up, have your exposures, in good sunlight, range from $1/75$ to $1/300$ for poses, to $1/1000$ to stop the ball, using between $1/250$ and $1/600$ for slides at the bases, or, if you do not have a focal-plane shutter, get small figures and enlarge, use a fast film or plate, focus beforehand, develop for contrast; then enlarge—and baseball-photographs make fine enlargements for framing—up to almost any size—I have seven 24×32 inches—and you will have some pictures to be proud of and to enjoy. So, pack up the photographic kit, "fight" your way to the baseball-field, prepare for anything and, "Play Ball!"

Livelihood or Pastime?

W. P. MATTERN



ARE you one of the amateurs who have thought long and often of going into the photo-business? There is nothing like trying it on a money-making basis, if you have at present a bank-account sufficient to tide you over the doubtful period—that is, if you are determined not to listen to the advice of those among us who have taken the same long chance and come out at the short end. Without consulting statistics of ambitious ones who have not tasted failure, common sense—a rare gift, by the way—will doubtless dampen the fire of your enthusiasm, if you give it a fair chance.

Probably, as a sort of spare-time proposition, the outcome would be interesting; but the *income* would possibly be a shock to your sensibilities on one point—peace of mind. In other words, it won't balance the expense-column of your ledger, much less the profit expected.

Here's the reason: In the first place, consider the start. If you are contemplating amateur photo-finishing, for instance, your probable agent will be the corner drug-store, and, maybe, several of them. Each receives its commission of generally twenty-five per cent—in some cases, that amount would not be considered sufficient. Then the cost of materials: allowing for an occasional drain through waste, the average cost in this line would be approximately fifty per cent of what you receive for the finished product. The balance would be your recompense for work: no profit except the opportunity to gain through experience, which you are supposed to have before you start. Let us illustrate another, more practical way:

A roll of film of twelve exposures is to be developed and printed. The size is the popular $2\frac{1}{4} \times 3\frac{1}{4}$. You can get a nominal charge for developing, though most already established places advertise to do it free, while we know positively that they recoup themselves on the prints. The public generally swallows the bait, however. Your price then would approximate ten cents for developing and five for each of twelve prints—a total of seventy cents. Deducting the agent's commission and cost of material, on the basis already mentioned, you have left about twenty-five cents for work and profit. Even if you consider this a pretty fair chance to take, what would you do when business stops suddenly and your surplus stock of material spoils through lack of foresight? Such

things must be taken into account. But I have not yet mentioned the biggest obstacle of the new-comer—when the other fellow becomes aware of your existence as a competitor. The other fellow is generally a big one, whose business is done on such a large scale that you have no power to stage a come-back.

The other fellow or firm will by this time have put a damper on your hopes through methods that are strictly business-like. He will offer your agent a commission large enough to make sure that you can come nowhere near it—for a time only. You might hesitate to believe this, but it's done and, unless you can offer a larger commission, your business is ruined. It probably would be, anyway, for I have experienced a time when my turn came, that my competitor did the work long enough for nothing to force me out.

If you were already sure of a long-established business, which you are in a position to buy out, then by attention to small details and an occasional complimentary print thrown in, the picture-maker can be counted on to come back again with his next roll. Otherwise any one, boiler-maker or bookkeeper, who is thinking seriously of giving all his time to photography with the view of making money at the business, is making a serious mistake. As a side-line, photography is profitable to some extent, and although some may succeed occasionally on an all-time basis, they are few and scattered. The business is over-done; you cannot compete with those already established so long as they are aware that you are a new-comer in the field. This sounds strange to your ideas of getting-there, probably; but try it and be convinced. I am writing of the experiences of about eleven persons who have been tried "in the balance and found wanting." Wanting what? Why, wanting the capital to establish themselves in spite of others, and wanting courage to continue when the weather-man asserted himself.

Keep at it as a hobby, by all means, and the future will find that you are progressing more rapidly toward the goal of master-photographer than if you worked at it merely as a means of livelihood. I said "merely," because in that case the work, formerly pleasure becomes business—unless you are one of those who can combine the two—and a thing that should never be injected into the most beautiful of all sciences—the Art of Photography.

My First Photograph

RUDOLF EICKEMEYER

Number Two



OW prosaic life would be were no sight called to mind, no sound repeated nor reference ever made to the days which have become ideal to us through the years!

I am walking a city-street, alone. I hear a song, crude in word and note; but I have a vision. Sights and sounds of the crowded thoroughfare disappear, I see my friend with whom I ranched, hunted and led a nomadic life on the north fork of the Platte in Colorado, in 1885, with sleeves rolled up—his musical effort attuned to the rhythm of his hands and arms as he kneads the dough for biscuit.

The picture awakens me to ecstasy, for I am again looking out of the cabin-door, where I am sitting, to the placid lake over the reedy marge where the wild ducks and geese are primping, flapping their wings or sporting with their fellows, to the foothills, almost barren save for a tree fighting here and there for existence.

I see the well-marked antelope trails and, from my favorite jackpine on whose topmost naked bough the eagle rested, the lower branches sheltering the partridge when snow came, gazing first far below me into the valley where in sinuous, silvery curves bordered with willows of a tender green the river winds, then beyond to the dense pine-woodland broken by lovely paths, the haunt of the deer and elk, over the gulches and the cañons, in deep-blue shadow, still farther above to the bright green alplands where the big-horn and the wild goats pastured, to the crowning sight of all, the great range of the Rocky Mountains covered with perpetual snow.

What has brought this earthly paradise to view? A phonograph sending out its raucous sound-waves from a store, and I am a boy again as I hear my partner's voice:

"I'm a dude, a dandy dude,
I dress in the latest fashion."

So awakening to live again in the past when Mr. French mentions my first photograph, I find myself well-nigh engulfed in thirty-seven years of reminiscences; for when I tried photography as a means of pictorial expression its possibilities so engrossed me that my camera was soon my constant companion and then a part of me. Later, after receiving honors at exhibitions and

the medal of The Royal Photographic Society of Great Britain, in 1895, I entered the professional field.

Proceeding with the narrative, this lengthy introduction recalls a stump-speech, years ago, at a minstrel show, on "the sports and pastimes of the American people." The kinky-haired speaker never got further than the title, and once in a while, with an earnestness in facial expression and voice that was uproariously funny, he would say, "but to return to the subject—the sports and pastimes of the American people." We filed out of the hall in good humor, but not one bit the wiser.

Perhaps, I am where I must say something bearing on the subject? But let me see. A story is basically no different than a house or a picture. It must have a foundation. In other words, begin at the beginning.

My father was an exceedingly thorough man and a prolific inventor who revolutionised the hat-industry and evolved many epoch-making inventions in the field of electricity.

In the progress of his experiments, in our plant, he would call in the local photographer. He was not always available and, as I was employed in the draughting-room, nearby, where I daily saw my father's work, it occurred to him that it would be a good idea to have me make the photographs.

With this suggestion in view, and with absolutely no knowledge of cameras save that acquired from textbooks at school, I called on a friend, a professional photographer, to learn that a customer of his had bought a camera and, tiring of it, wished to sell it. This I purchased. It was a 5 x 8 camera with Platyscope B lens, six double wooden plateholders, abnormally thick, complete with tripod, and a wooden box with leather-handle.

The outfit arrived on a Saturday, and I hastened to my friend's darkroom where he showed me the method of placing plates in the holders. I recall how remarkable it seemed that he could tell the glass-side from the film-side of the plates by touch.

Sunday morning dawns, clear and bright, the ground covered with snow. I am in the parlor of the big house. My little sister is to be the subject in the bay-window which is flooded with sunlight and the reflections from the snow.



MY FIRST PHOTOGRAPH

RUDOLF EICKEMEYER

I brought in a rocking-chair from the piazza and a book from the library.

Kind reader—for the reader at this stage of my story simply must be kind—remember to be lenient, patient.

I had not at that time reached the stage when I knew the value of simplicity in picture-making. I felt the need of accessories, so brought in the easel with its plaque and framed engraving of the Italian Madonna. With this, the worst, told and an easy conscience possible to one who has opened his heart in humble confession, my narrative will now glide to its end.

I was enthusiastic and about to expose the plate, when my father stopped at the door on the way to the library. Although he had never made a photograph in his life, his trained eye saw a situation which would have made my first

photograph less interesting had he not interrupted.

The camera, as high as the tripod permitted, was pointed down at my sister. Father came in the room and, stooping with eyes level to my sister's, said, "*this should be your point of view.*" "Just common sense applied to photography," you will say. Quite true; but I recall what an old Scotchman of our city said when accused of lacking so very desirable a characteristic. "Yes; common sense is a very good thing, but very few have got it." I believe, after judging many thousand photographs, that it is as rare as good taste. Fortunate was I, indeed, that so vital a truth in portraiture should have been imparted and incorporated in my first picture. The light direct into the lens from the top of the window which I could so easily have shut off

by the indoor-blind, is evidence of the rudimentary stage of my knowledge.

The photograph is not, however, lacking in modeling. A likable picture could be made by elimination, toning and trimming; but I have stuck to the text and the illustration is not only made from my first photograph, but the actual first print—unretouched and on albumen-paper.

Allowing for loss in brilliancy, it is much the same as when made on February 3, 1884, the date which it bears.

It may serve as a lesson. It contains many.

[Many of our readers, naturally, will be interested to know that representative examples of the work by Mr. Eickemeyer have been published in PHOTO-ERA MAGAZINE as far back as 1900, the second year of the magazine's existence. It has been the pleasure of the Editors to publish, since that year, about thirty pictures that exemplify the versatility of Mr. Eickemeyer's creative ability. The first of this long series of photographs by Mr. Eickemeyer is the "Dancing-Lesson," which appeared as frontispiece in the issue of July, 1900. This masterpiece in genre-photography, exhibited and admired in this country and abroad, was succeeded by landscapes and genres in the following issues: November, 1900, three landscapes with figures; April, 1901, harvesting-scene with figures; May,

1902, head of an attractive young girl with loosely falling hair, also favorably known; August, 1904, full-length portrait of Miss A.; May, 1905, portrait of Lillian Blauvelt, well-known American singer; September, 1905, "An Appreciation," by Sidney Allen, illustrated with a number of Mr. Eickemeyer's best works, including "Immortelles" (a beautiful field of Everlastings), "Reverie" (female head), "A Summer-Sea" (an impressive marine), full-length portrait of Miss Hoffman as Calpurnia, "Winter" (an expansive winter-scene), "A Japanese Landscape," "The Sea" (a beautiful interpretation of the subject) and a bust-portrait of Miss A.; October, 1907, "Idyl of Spring" (an ideal female head); December, 1908, a large view of a stream in winter; April, 1909, "A Vision" (bust-portrait of a beautiful girl); August, 1909, pretty landscape with three specimens of a well-known feathered tribe, entitled "Three Ducks on a Pond"; December, 1911, "Mildred" (head of a young girl); February, 1914, landscape; January, 1915, "Vesper Bell" (portraying an old woman with hands clasped and head bowed in prayer); January, 1917, landscape with sheep; June, 1918, wood-interior; June, 1919, "A Nova Scotia Forest." Mr. Eickemeyer also served as member of the PHOTO-ERA JURY at several of its annual pictorial competitions.—EDITOR.]

True Education

EDWARD SHAUNESSY



MR. EDISON is dealing with a single aspect of education and at best we have only his impressions of what constitutes education. Let us see if his theory is not in part a misconception. I quote from William James:

Education consists in the organising of resources in the human being, of powers of conduct which shall fit him to his social and physical world. An uneducated person is one who is nonplussed by all but the most habitual situations. One who is educated is able to extricate himself from circumstances in which he never was placed before. Education, in short, cannot be better described than by calling it the organisation of acquired habits of conduct and tendencies to behavior.

In other words, education is the organisation and right use of powers and faculties.

Let us go deeper than James: Education is the manifestation of the perfection already in

man. It is already coiled up in man; as he goes through life, he overcomes obstacles and unfolds it. Education and progression simply mean taking away the obstacles and, by its own nature, the power within man will manifest itself.

The momentum is not from without, it comes from inside. Education cannot be superimposed on man. It is not to be found in books. We find in books only what we already know, our own alienated thought brought back to us. We take from books only what we can absorb. Books are the hints, the suggestive element.

The questions submitted are no test of a man's capacity for thinking with precision and accuracy nor of his perceptive power, his deductive power or his mind values or power to act and react. Take him into the laboratory and let him unfold what he already has within. Training of the mind does not consist in cramming with facts but in drawing out its powers.

What we need is man-making education, institutions for making men and men for making institutions.—*The New York Herald.*



A SUMMER-SEA
RUDOLF EICKEMEYER

Hobbies

SIGISMUND BLUMANN



MY dog is a good dog. He is considered intelligent—that is, he comes when he is called and, in wet weather or when the garden-hose is turned his way, goes under cover. He has been trained to do certain things at command, and does them. He knows those that belong to the household. Instinct and a keen sense of smell inform him when meals are cooking. He loves the children and hates the scavenger. Once a day, he gets the city-dog's freedom and avails himself of it by running at full speed till tired. That also is his instinct for exercise. But after all, he is only a dog. He reads nothing, is not addicted to any hobbies outside of bones and the tracing of other canine visitations. Also having eaten all he can hold, he buries his bones, although he should know, after several years of regular and sufficient feeding, that the next meal will bring him enough and another bone to hide. He is, in a word, as safe and sane as any man of big business. Like, too, in that one may truly consider him overfed and oversexed. This advantage is his, however, he seems never tired or bored. His singleness of purpose and freedom of hobbies recommend him to masters of finance. In place of paintings, bric-à-brac and bonds, he collects and hoards the aforesaid bones, with this in his favor—that he understands and appreciates bones, and many a millionaire wonders, as he stands before his latest acquisition, what that picture or statue is all about, anyhow. Think this over, also: Having buried his overplus of food, the beast is likely to forget it, whereas the moneyman's mind carks night and day over his hoard.

The higher up the scale of animal-life we go, the more evidence we find of versatility. The humans with fine minds enjoy doing many things instead of only one. But as the needs of subsistence and existence require one fixed and definite occupation—which takes the form of a business, art, trade, or profession—the various side accomplishments cultivated for no profit but wholly and purely for pleasure have been differentiated under the title, "Hobby." Now there are ethics to hobbies. Decidedly. The banker who accumulates paintings or rare books, because he must have something different to advertise his affluence; the ironmonger who gives away libraries, and the human octopus who endows colleges to keep from being submerged in his rapid increment of gold—these cannot be said to have a hobby. The poor fellow who

works six days a week, and on Sundays wakes early, vamps a light breakfast, loads up with twenty pounds of camera, plates and tripod, and hurries afield to catch some trick of sunlight and shadow in the green places where trees whisper and streams talk a language which he can understand—this poor fellow who is richer than Carnegie or Rockefeller, if he but knew, has a hobby. It is his badge of nobility, that escutcheon by which you may distinguish him from the dog.

My dog, of whom so much is said here, is very fond of me, and I am very fond of him. Faithful beast; he would probably die for me. They say dogs do such things. But, somehow, when a stranger calls on me to talk photography—though he be shabby and finds me in overalls and begrimed—we are brothers. We belong, you see, to the higher degrees of a mental Free- and very-much Accepted Masonry. I leave and forget my dog to spend the day with this visitor. This is said with all the pride the words carry. I hold myself through life, self-constituted spokesman, for hobbies. Modern specialists in medicine and psychology (which are closely allied) prescribe hobbies to men whose brains have become vitiated with concentration upon one idea. The prescription is too lightly given and too hastily taken. It had better be written like a recipe for nostrums, and might read something like this:

"R. Take one occupation that shall bring no money-returns,
one day a week and several spare hours now and then,
call it a hobby and pursue it with enthusiasm.

Sig. Above to be taken with a whole heart and sincere affection."

What I have said of rich men must seem so bitter and so sweeping that it fails of conviction. Right! Many a millionaire is bound to his slavery of moneymaking by circumstances over which he has little control. Call it Fate. He is not a willing or a stupid slave. When a threatened or an actual breakdown compels him to retire, he opens his arms to some hobby that has been waiting for him. Even in his active years, many a Cressus is collecting old books which he loves and plans to read some day. May God be good to him and grant him those days and not strike him dead before he has a chance to thumb the pages of his treasures.

As things go, I am poor in a worldly sense,



ATTENTION!

WILLIAM S. DAVIS

but nothing in life has consoled me for the lack of money like my hobbies. I am rich enough to have several. These hobbies have made me friends that money could not buy. They have brought me wholehearted, disinterested, suspicionless friendships and they have created in me an ability to enjoy leisure when it is granted me. My children have grown closer to me for this human side of their dad, and the good wife smiles indulgently when I mess up the house with my chemicals, or my watercolors, or my collection of tools, and, I suspect, thinks me a pretty good sort of fellow. She shares my hobbies and enthuses with me. But then she is such a clever woman! And do you know, should it be that she only feigns this interest

it brings us closer together. Whereas, if she had an interest keen or pretended in my investments, the spirit might not be so lofty, or so uniting. What do you think?

And so, though I am rather an unambitious fellow, who works hard and enjoys his work, and plays hard and enjoys his play, and has done nothing noteworthy and never shall do anything noteworthy, and is considered rather a simple fellow by his successful acquaintances, I laugh in my sleeve and go on with my even career. The youngsters have a clear, calm mind and a vision of the perspective of Life. At times, I feel like one on a hilltop with the moiling, boiling city below. The sounds of the many come to me. I see the smoky haze. Men are

massing millions down there during the day, and, when at night they go to what they call home, they will plan the massing of more millions tomorrow. Poor workmen with dull minds are flirting with death for a pittance and, when the occasional holiday comes to them, they will lie like my dog, and call it rest or, unlike my dog, will swill strong liquors and say it is pleasure. From my pottering around with pictures, and colors and books, and things, I have happened

upon that Universal Language which Bryant says Nature speaks to "Him who holds communion with her visible forms." I set up my tripod, look at the groundglass, expose, and, when the sun is setting, go home with a clean, soothed mind, lungs filled with oxygen, and a good appetite. After a home-dinner, the darkroom and pleasant thoughts for company in the reddit solitude. The black spots form on the plate, it is coming up. Why, look! I've made a picture.

Speed-Limits



LN Jules Verne's book "From the Earth to the Moon" a happy description is given of the old-time rivalry between makers of big guns and makers of armor-plates. As soon as a gun capable of shattering any existing armor-plate came into being, inventors set to work to produce armor that laughed at the new monster's projectiles. This armor having been installed, only a short interval would elapse before the appearance of another and more formidable gun capable of penetrating the improved plates as if they were made of cheese. Fortunately, the emulation among lens-makers and plate-makers in the direction of attaining the highest possible speeds is on a different basis. Although their efforts can hardly be said to be co-ordinated they are both striving for the common good of those for whom they cater, and the success of one does not necessarily prejudice the success of the other. At the same time it is a pertinent reflection that possessors of very rapid lenses can, as a rule, afford to ignore the introduction of ultra-rapid plates, and many will be inclined to welcome plates of extreme sensitiveness chiefly because by using them they will be spared the necessity of buying costly wide-aperture lenses.

Within limits, progress, whether competitive or not, in both these connections is heartily to be approved. Quite apart from what is mere freak-photography, there are several branches in which a combination of great lens-speed with great plate-speed is eminently desirable. Press-photography has become part of our daily life, and for the press-photographer no lens or plate can be too rapid, provided that decent results can be obtained without adding prohibitively to the weight or bulk of the apparatus carried, or detracting prohibitively from the ease and quickness of the operations subsequent to exposure.

Lenses and plates enabling high shutter-speeds to be used on a winter-afternoon are distinct desiderata. Instantaneous photography by artificial light can still do with further assistance from the optician and emulsion-maker. Recent introductions point to the possibility that before long snapshots of scenes on the stage may be made with ordinary theater-lighting. An attempt in that direction was made, it may be remembered, a good many years ago by Dr. Grün, who invented and put on the market a lens working, more or less inefficiently, at F/2. But the result was extremely poor. Indeed, in this case, it is obviously to increased plate-speed rather than to increased lens-speed we must look for satisfactory progress, for no picture of a stage-scene made at a larger aperture than F/8 is likely to be really pleasing.

The limitations of lens-speed are clearly defined and familiar to most photographers. Lenses of excessive rapidity have long been available for those who required them for special work. In addition to the Grün lens just mentioned an F/2 portrait-lens was formerly made by Dallmeyer, and is still sometimes met with in second-hand catalogs. If we remember rightly it was known as the 3c, had a focal length of about 12 inches, and was intended mainly for cabinet-pictures of children. Such an objective was necessarily both bulky and costly, and its popularity was therefore limited. For particular purposes, where only a very small picture was required, it was possible years ago to put together a lens working at F/1.5 by combining two of the old Zeiss single telepositives, which worked at F/3 and had a focal length of $8\frac{1}{4}$ inches. But few, we imagine, went to the length of buying two of these objectives, which cost about \$100 apiece, in order to produce a combination with a focal length of only a trifle over 4 inches. Nowadays there are several F/3 lenses



EVENING ON THE NISHNA

A. S. WORKMAN

on the market, other than those employed for kinematography, and one firm has in hand an anastigmat of focal lengths up to 12 inches with an aperture of $F/2.9$. A 12-inch lens has been made which covers a half-plate satisfactorily.

It goes without saying that, although very wide apertures are extremely useful for kinematograph and other work in which only very short focal lengths are commonly needed, it is only very rarely that a lens with a focal length of over 6 inches can be used satisfactorily at an aperture wider than, let us say, $F/5.6$. The depth of focus condition is a veritable rock ahead in the way of all progress in lens-manufacture, as far as aperture is concerned; and on it the popularity of the $F/3$ lens among any but users of very small cameras is likely sooner or later to split. On the other hand, tiny pictures made with a very short-focus lens of this extreme rapidity will, if the lens is anastigmatically corrected, stand considerable enlargement. There is also a special sphere of usefulness for very wide-aperture objectives in connection with astronomical and instantaneous color-photography.

The question whether the sensitiveness of emulsions can be increased to a much further extent with advantage to the photographic world in general is one which can be variously argued.

Formerly, increased rapidity was accompanied by an appreciable coarseness of grain, and, where the quality of the negative and its capacity to stand enlargement were primary considerations, workers were inclined to shun plates of the ultra-rapid, 500 H. and D. description. But some of the modern very fast plates are of by no means objectionably coarse grain, and yield negatives of excellent quality. As new color-sensitising dyes come to be introduced, we may expect further advances in rapidity, apart from increase, in the sensitiveness of the original emulsion. It may be thought that it is possible to have plates that are too sensitive, since no method is likely to be devised by which they can be packed, as well as coated and cut to sizes, in total darkness. But if emulsions ten times more sensitive were to be made, our plate-manufacturers would probably be equal to the task of coating them. As things are, there is no plate on the market which cannot be more or less conveniently handled, and, of course, as regards development, otherwise than in a tank. And it must be remembered that we are only at the threshold of knowledge of imparting highly selective color-sensitiveness to plates, and further from what may be of importance, namely, selective color-insensitiveness.

The British Journal.



MARRIAGE-PROCESSION OF PRISCILLA

HAROLD GRAY



EDITORIAL



A Worthy Photographic Project

ALTHOUGH the time has passed when photographers were clannish, and classed gregariously with tradesmen, there is room left to improve their standing in nearly every community. It is not enough that the respectable ones are members of fraternal organisations, or that, in many cases, they belong to high-class social clubs. They should assert themselves more, and rely upon their beautiful and indispensable art to give them the social prominence that they deserve. The fact that there are many followers of the profession whose methods are far from being ethical, or exemplary, should not deter those of the better class from asserting their individuality as artists, honorable business-men and model citizens. Professional photography is made up largely of the finest types of men and women, who should seize the opportunities open to them for civic, social and educational activities shared by others whose vocations, in many cases, are not on a par with that of professional photography. We have pointed out, in the past, numerous ways by which photographers of both sexes may gain desirable prominence as officers in organisations active in the best interests of the community, and fulfil the incumbent duties in a creditable manner. Certain well-known professional photographers, by reason of eminent fitness, occupy high positions in the affairs of art, education or politics. During the late war, too, photographers assumed new and responsible duties, in the performance of which they won distinction and reward.

There is one thing, however, in which photographers do not take sufficient interest and which, if properly carried out, would redound to their credit and make the public their debtor. By this we mean the effort to display, by photography, the architectural beauty of the public buildings, monuments and churches of the city in whose welfare and reputation they are interested. It should not be left to the amateur clubs, many of which already are doing much toward the development of their city's appearance. If there be no concerted effort of the professional photographers of a city to aid in the artistic appearance of its parks, streets and public buildings, there should be, at least, one capable and progressive citizen-photographer

who would take it upon himself to produce a collection of artistic photographs portraying the dignity and beauty of the city's public buildings and monuments. This was done in the case of a certain city, in the East, by a local photographer, who was also bright enough to procure an appropriation from the city to cover the cost of preparing such a collection of prints. In every city, large or small, there should be a permanent public exhibition of photographs of all its public buildings, monuments and parks—the result of a local artist-photographer's best personal efforts. It happens, only too frequently, that visitors to a large city miss seeing some of its important features. This might be obviated by the tourist's first inspecting a representative collection of artistic photographs of the city's architectural and scenic attractions.

If the suggestion made in this article is practical, and worthy of adoption, let the wide-awake and progressive photographer give it the benefit of his best thought and aid in its realisation. In the end, there should be a capable art-commission to pass on the artistic and technical merits of such a collection of photographs, so that only the best be placed on permanent, public exhibition, and prove to be an effective and perpetual means of publicity.

Photo-Swindlers Rampant

THE daily press reported early in July a number of arrests in connection with the sale of stock of fraudulent motion-picture enterprises. It is astonishing how much of such stock is sold; but one needs only to consider how many persons are eager to buy it. These same people should invest their savings in Liberty Bonds or Postal Savings-Stamps where the return is comparatively small, but sure, and where the investment is beyond question. But this form of investment lacks charm of novelty and excitement, hence the unscrupulous promoters exploit successfully a form of human weakness that exists everywhere—in other countries, as well as in America. It is a subject for a sermon that should be preached in every church, at least once a month; but then there are so many topics that are not easy of comprehension or explanation which take precedence in many pulpits. Human nature is a strange thing.



ADVANCED COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value \$10.00.

Second Prize: Value \$5.00.

Third Prize: Value \$2.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Prizes may be chosen by the winner, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, of artistic design, suitably engraved.



Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. *No more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Remember that subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.* Prints on rough or linen-finish surface and sepias are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. All prints should be mounted on stiff boards.

3. *Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data.*

4. *Each print entered must bear the maker's name and address, the title of the picture and name and month of competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for a 2-cent stamp. Be sure to state on the back of every print exactly for what competition it is intended.*

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, this does not prevent the photographer from disposing of other prints from such negatives after he shall have received official recognition.

6. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins; but in every case, prints should be protected by strong, stiff boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

7. Competitors who have won three first prizes within a twelve-month, become ineligible for two years thereafter. The too frequent capture of the first prize by one and the same competitor tends to discourage other participants and to make the competitions appear one-sided and monotonous.

Awards—Street-Scenes

Closed May 31, 1921

First Prize: None awarded.

Second Prize: Elliott Hughes Wendell.

Third Prize: Donald R. Battles.

Honorable Mention: Charles P. Abs, Gertrude Bennett, Walter Birdsall, N. E. Brooks, F. H. Chant, James J. Connors, James H. Downey, Harry A. Erickson, Thomas Farmer, J. H. Field, G. W. French, C. W. Gibbs, J. H. Kiancke, Alexander Murray, Hannah G. Myrick, M. W. Reeves, F. H. Rodgers, Ford E. Samuel, J. Herbert Saunders, Kenneth D. Smith, Herbert B. Turner, Paul Wierum, Leopold Zwarg.



Subjects for Competition—1921

"Winter-Sports." Closes January 31.

"Home-Portraits." Closes February 28.

"Copying Works of Art." Closes March 31.
(Paintings and Statuary.)

"Home-Scenes" (Interior). Closes April 30.

"Street-Scenes." Closes May 31.

"Summer-Sports." Closes June 30.

"Summer-Flowers." Closes July 31.

"Marines." Closes August 31.

"Outdoor-Genres." Closes September 30.

"Architectural Subjects." Closes October 31.

"Domestic Pets." Closes November 30.

"Indoor-Genres." Closes December 31.



Photo-Era Prize-Cup

In deference to the wishes of prize-winners, the Publisher will give them the choice of photographic supplies to the full amount of the First Prize (\$10.00), or a solid silver cup, of artistic and original design, suitably inscribed, as shown in the accompanying illustration.



Competitors Should Mind the Rules

COMPETITORS, in the Advanced Workers' and Beginners' Competitions, are inclined to ignore some of the rules, one of which is that the name and address of sender, also name, month and kind of competition must be written plainly on the back of each print. Otherwise, how is the jury to know?

This is often the reason why careless entrants wonder what has become of their prints. Let them be more careful in the future. We will do our part, gladly.



THE CLOCK-CORNER

ELLIOTT HUGHES WENDELL

SECOND PRIZE — STREET-SCENES

View-Finders

THE view-finder is a very necessary adjunct to the hand-camera, says a writer in *The British Journal*, and it is occasionally useful on the view-camera; but, unfortunately, it is not always as perfectly adjusted as it should be, and, moreover, is not always convenient to use. The reflex-camera has, of course, the most perfect system of view-finding, since, not only is the image identical with that projected upon the plate; but adjustment for different lenses, rise of front, and distance of object is made automatically. The twin-lens camera is little inferior; but it does not permit such accurate centering of the image when the subject is close to the lens. The bulk and cost of both these instruments have kept them from being so popular as the lighter folding-models, of which there are so many varieties, that a little study of non-focusing finders may be found profitable.

Broadly speaking, finders may be divided into three classes, those in which the image formed by a small lens is received upon a groundglass placed parallel with the axis of such lens, the necessary deflection being provided by a mirror; those in which the image is received by a second convex lens in lieu of the groundglass, and those in which the image is either viewed directly through a single concave lens or a combination of concave and convex lenses.

Before dealing with the special features of each of these it may be useful to caution the purchaser of a hand-camera to check the coincidence of the finder and plate before starting upon any serious work, since there is always the possibility, that even if the angle of view be correct, the finder has become decentered either by shock or strain.

The groundglass-finder, if well made, is the most reliable form; but the image is not seen easily in the open air, since the hoods usually provided are quite



OLD NUREMBERG

DONALD R. BATTLES

inadequate to shade the groundglass. If a circular spring-clip be provided to hold an ordinary focusing-magnifier in position, this trouble will be overcome, and great accuracy in placing the image obtained. As with an ordinary focusing-screen, a little oil or grease upon the ground surface will be an improvement.

The brilliant finder in which the image is formed upon the surface of a field-lens does not require any shading, even in a bright light; but, unless well made, there is a likelihood for the image to shift when the eye of the user is moved. If properly made, the image will disappear if the eye is decentered, but will remain stationary as long as it is visible. With persons having normal vision, no magnifier is necessary; but it is necessary with those afflicted with "old sight," which necessitates the unaided eye being kept at a distance at which it is difficult to see the details of the image. Ordinary reading-spectacles will serve the same purpose; but as these, unless bifocal, preclude clear vision of the actual subject, they are better dispensed with.

The foregoing types of finder have the disadvantage, which they share with the reflex-camera, of giving

lateral inversion of the image, and when photographing moving objects, and thus may prevent the correct moment for exposure being chosen. For example, if we wish to photograph a coach which is approaching from the operator's right, it is rather embarrassing to see it enter the finder from the left. For this reason, among others, the direct-vision finder is generally used by press-photographers.

The direct-vision finder usually consists of a rectangular concave lens fixed with a spring-hinge at one edge of a metal plate, a small pointer or sighting-vane being fixed at the other edge. Cross-lines are ruled upon the front lens, and the finder can thus be aligned upon the center of the picture in the same way as a rifle-sight. A small convex lens is sometimes fixed in the sighting-vane, and is a great help in getting a correctly-centered view. Finders of this type are intended for use with the camera at the level of the eye, but those of the reflecting-type must be used at waist-level. There has, however, been one finder—the Adams Rectiflex, not now obtainable—in which the image seen through a concave lens is formed by

HONORABLE MENTION
STREET-SCENES



LATE AFTERNOON
ON BROAD STREET

GERTRUDE BENNETT

means of a doubly-reflecting prism not only upright but without lateral inversion.

A very useful finder, which has the advantage of accommodating its angle to any lens which can be used upon the camera to which it is fitted, consists of a wire-frame—the size of the plate—fixed immediately above the lens-board, and a sighting-vane, fitted over the plane of the groundglass, gives the correct position for the eye of the observer. Finders of this class are sometimes made upon a reduced scale with a fixed distance between sight and frame; but are obviously limited to use with one focal length of lens.

From time to time many special forms of finder have been made for various purposes. One commonly used upon Kinematograph cameras consists of a square wooden tube at one end of which is a lens; halfway down the tube is a groundglass-screen, the remaining length being used as a hood. If the section of the tube is twice the linear dimensions of the film it is easy to keep the camera accurately centered upon the subject. This type is sometimes fitted to hand-cameras by those who prefer a groundglass-screen with

an easily visible image. A spectacle lens of suitable focus, fitted to the rear end of the wooden tunnel, adds to the value of the arrangement.

More than one attempt has been made to produce a small finder which, by a kind of gearing down, indicates when the working lens is correctly focused; but, so far, without much success, the apparent depth of focus in the smaller lens being deceptive. Such devices are usually required for use in conjunction with large working apertures, and a finder-lens working at $F/3$ was found to be unreliable when used with an objective at $F/6$.

An important factor in hand-camera work is the height of the lens from the ground. Many subjects look quite different at waist-level and eye-level, and every worker must choose for himself which type of finder will serve him best. For press-work the eye-level finder is undoubtedly superior, as it allows the camera to be raised above obstacles or used in a crowd. Our advice is, if possible, to have two finders, so that either position may be utilised. Finders which combine direct and reflected images are best avoided,



SUBJECT FOR NEXT COMPETITION ADVANCED WORKERS



THE END OF THE STORY

JOHN W. GILLIES

EXAMPLE OF INTERPRETATION

Advanced Competition—Outdoor-Genres Closes September 30, 1921

THERE is no competition that seems to have a stronger appeal than the one devoted to Outdoor-Genres. One reason is that the human element plays such an important part; and the other, that good subject material may be found at every hand. In addition, weather-conditions at this season of the year favor the worker. The vacation-days lend themselves readily to the camerist who seeks suitable material. There is life and activity all about us. In short, the camerist is limited only by his artistic skill and by the equipment that he is able to use intelligently.

Perhaps, there is no term used in artistic photography that requires more explanation than "outdoor-genre." The Editors of PHOTO-ERA MAGAZINE have defined the term so frequently that they feel that readers must be bored. However, the fact remains that many new readers and subscribers desire light on the subject, so that we feel in duty-bound to help them as we have tried to help those who are now well informed.

In considering the general subject of outdoor-genres, I believe it to be well to recall Webster's definition, "a genre is a style of painting, sculpture or other imitative

art, which illustrates *everyday life and manners*." Do not overlook this point. Some outdoor-portraits *may* be genres; but a *true* genre could never be a strictly technical outdoor-portrait because a genre-portrait is usually more spontaneous and true to life than a formal portrait. It shows the subject smiling or even laughing, seated, perhaps, in a boat, hammock, or motor-car. In short, an outdoor-genre should represent the subject—be it man, woman or child—as the camerist finds it. Contestants may take my word for it that, to make a good outdoor-genre—portraying the subject as it is and, at the same time, with due regard to pleasing composition—requires no mean degree of skill. It is a severe test of technical and artistic skill, and this competition should appeal to ambitious camerists on that very account.

Before sending in prints, it might be well to look up the definition of genre in some authoritative text-book, "Photography and Fine Art" by Henry Turner Bailey, and to read such a book as Hammond's "Pictorial Composition in Photography." In a general way, we all know what the word means; but in this competition it is essential that we understand its exact significance, otherwise contestants may experience disappointment. My reason for emphasising this point is to make clear

that outdoor-portraits, landscapes, groups, etc., are not acceptable, no matter how technically perfect, or artistic in intent, they may be. The clearer that the correct definition of outdoor-genre is carried in the mind of the worker, the nearer he will come to winning a prize or an Honorable Mention.

There is a distinct advantage in planning carefully to send prints that are *true* outdoor-genres. By that I mean that it is a wise step to decide upon one type of outdoor-genre and to concentrate on that to the exclusion of others. Obviously, those camerists who are at the seashore should not attempt to portray rural life, and those in the mountains should not attempt subjects of marine-character unless they happen to be near a very large body of inland water. Workers should make the most of what is at hand. In no case, force the issue. Take the subject as it is found and with individual brain-power and technical skill make it a beautiful picture. Let us suppose that the camerist decides to devote himself exclusively to an old inhabitant of a village who sits day by day in front of the "general store." First, it requires diplomacy and kindness; second, many (not too many) attempts; and, finally, great care to select the print which best portrays the subject and expresses that which was in the mind of the camerist. In fact, it might require an entire season to obtain the right subject amid appropriate surroundings. Lest I be misunderstood, let me say that I do not infer that the camerist should use roll after roll, or dozens of plates, to obtain just the right result. What I do mean is that *whenever* he has this competition in mind, let him stick to one type of outdoor-genre; at other times, let him photograph other subjects that appeal to him.

There is virtually no limit to the supply of material for delightful outdoor-genres. Whether the available material is made into successful pictures is a matter that rests solely with the camerist. Children at play, harvesters at work in the fields, dairymaids, fishermen, gate-tenders, scissors-grinders, peddlers, traffic-officers, ferry-men, carpenters, plumbers, postmen; also relatives, friends and pets—all are promising subjects for excellent outdoor-genres. There are many good subjects that I have not mentioned; but I am sure that the worker can easily think of others that are as good as, if not better than, those I have listed. Again let me remind contestants to remember the definition of genre and to see to it that each picture illustrates some phase of *everyday life and manners*. For example, no real camper in his senses wears a blue coat, white flannel trousers and white shoes as he busies himself about the camp-fire, neither does he wear such apparel when he is fishing. It is well to remember that consistency is a jewel. Motion-pictures serve as excellent examples of the value of accuracy and the portrayal of characters true to the life. One can imagine how an audience would accept Mary Pickford if she depicted life in an orphan asylum or as a member of a poor family dressed in any manner other than true to actual conditions. The motion-picture producers learned the value of accuracy long ago, and we know to what expense they will go to reproduce famous places or buildings according to the very drawings of the original so that the audience may indeed feel itself to be in London, Egypt or the South Sea Islands, as the case may be. Unless the camerist makes a picture that he knows to be according to fact, it will not ring true, and the beholder will fail to grasp the thought behind it.

Probably in no competition have the owners of vest-pocket and hand-cameras such an opportunity to use their outfits to advantage. In most cases the making of a good outdoor-genre lends itself to the unobtrusive-

ness of the small camera; and many a picture may be had that would be lost before an 8 x 10 view-camera could be set up. Moreover, such a large equipment is very apt to make the most accommodating subject ill at ease and "camera shy." Even professional models find it very difficult to gaze unflinchingly into the gaping maw of an 8 x 10 studio-lens and "register" spontaneity—unconcern and easy relaxation. How much more difficult it must be for some old fisherman or hard-working farmer! The more unobtrusive the preparations for all genre-photography, the better is the result. The more impromptu the making of the genre, the more natural and gratifying will be the portrayal. Unostentatious speed is a great speed. The quicker the picture is made—with due regard for exposure, focus and composition—the more the subject will like it and the greater the chances of ultimate success. Prolonged "arranging" of the subject or accessories should be avoided. The camerist should train himself to "size up" a situation quickly, to decide whether the subject and the setting meet his requirements, to make the picture and to go on his way without attracting undue attention to himself or to the subject.

Perhaps, no competition is better adapted to the individual artistic temperament of the camerist than the present one. He may elect or prefer to portray the pathos of the ghetto, the care-free play of children on the beach, the vigilant efficiency of the sturdy traffic-officer or the labor of the harvesters. In most cases, the camerist will make the best outdoor-genre of a subject that appeals to his heart as well as to his mind. Usually, a subject that fills the camerist with deep emotion, whether of sorrow or joy, will affect the beholder similarly. Of course, it is understood that the subject in question must have more than local interest. Its appeal must be general. A beautiful child, artistically and truthfully posed, is a subject that has universal interest; but the same child photographed in an environment which limits the interest to relatives and friends will fail to make a strong appeal to the beholder. It is true of photography as it is of painting, sculpture and literature that the subject of greatest general appeal is one that all may enjoy the world over. Such a picture will appeal as strongly to the people in England, as to those who live about us. There is a tremendous satisfaction in doing or making something that will cause persons *everywhere* to acknowledge your skill and artistry. In this connection, let me repeat what I have said several times on this page, and that is to remember always that the truly great things are invariably simple, even in selecting a group as a subject. In short, they appeal to the most educated critic and also to the modest laborer equally. Any picture that can meet such a test, is a joy forever.

The jury is very eager to see if there is not some contestant who can send in a print that is new in theme and execution. From many interesting and profitable chats with amateur workers, I am led to say that in many cases there is too much bashfulness—too much shrinking from giving out what is truly good and beautiful. Although we admire and have grown fond of our many old friends, we are eager to welcome many workers who are doing excellent work but appear to have "stage-fright" when it comes to entering a print in one of these competitions. We hope that all such friends and readers will pluck up courage and begin with this competition to be regular contributors. Our standards are high, we admit; but all the same there is a heart back of it all and we value and respect the efforts of every contestant whether known to us or not.

A. H. B.



BEGINNERS' COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U. S. A.

Prizes

First Prize: Value, \$2.50.

Second Prize: Value, \$1.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Subject for each contest is "*Miscellaneous*"; but original themes are preferred.

Prizes, chosen by the winner, will be awarded in photographic materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

Rules

1. This competition is open only to beginners of not more than **two** years' practical camera-activity, and whose work submitted here, is **without any practical help from friend or professional expert**. A signed statement to this effect should accompany the data.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints from $2\frac{1}{4} \times 3\frac{1}{4}$ to and including $3\frac{1}{4} \times 5\frac{1}{2}$ inches, and enlargements up to and including 8×10 inches.

4. Prints representing **no more than two different subjects**, for any one competition, and printed in any medium except blue-print, may be entered. They should be simply and tastefully mounted. **Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.** Prints on rough or linen-finish surface paper and sepias are not suitable for reproduction, and should be accompanied by smooth prints that have the same gradations and detail.

5. **Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data. Criticism at request.**

6. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, he may dispose of other prints from such negatives after he shall have received official recognition.

7. **Each print entered must bear the maker's name, address, instructions, the title of the picture and the name and month of the competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type, and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for 2-cent stamp. Be sure to state on the back of every print for what contest it is intended.**

8. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins, but in every case, prints should be protected by strong, **stiff** boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

Awards—Beginners' Competition Closed May 31, 1921

First Prize: Dr. Clinton L. Decker.

Second Prize: M. J. Burelbach.

Honorable Mention: John J. Griffiths, Arthur D. Madge, John R. Rasmusson: C. H. True.

"What Have You to Show for It?"

THERE are many occasions in life when this question proves to be a searching one. There are some amateur and professional photographers who might find it very difficult—if not impossible—to answer this question satisfactorily at the end of the photographic season. Perhaps, this question is of great importance to the beginner. What has he to show for his first season's work? To be sure, he may have prints; but are they *pictures* or *records*? Are they well exposed, developed and printed; or are they under-exposed, scratched and stained? Can he show these prints with pride or is he obliged to find every possible excuse to justify his own carelessness and failure? Is photography a pleasure to him or has it degenerated into a confused, incomprehensible pastime?

There are many beginners who are eager to make good pictures and are really sincere about it, at the beginning; but a succession of poor results or failures is apt to produce discouragement and, finally, the desire to consign the entire photographic outfit to the ash-barrel. Of course, some beginners are made of "sterner stuff" and refuse to become "quitters," no matter how dismal their photographic failures may be. Then, there are those who plod along with fair success, but seem unable to rise above a certain level of attainment. Lastly, we have those who, from the very first exposure, make a success of photography—not because they have greater ability, but because they intend to have something to show for their investment of time and money. They intend to stand or fall, photographically, by the skill and the workmanship that they display throughout the season. They ask and expect no quarter in the form of excuses. To overcome photographic failure and discouragement is their one objective. Needless to say, they will have something to show for their summer's work.

Of course, photographic failure is not always traceable to the beginner's personal efforts. Conditions beyond his control or beyond his experience may become a deciding factor; but in most cases, photographic failure is due solely to the individual and not to his equipment. There are too many examples at hand to prove that the man or woman who uses a camera, and not the camera itself, is often the cause of photographic failures. Witness the number of beautiful exhibition-pictures made with simple, moderate-priced outfits in the hands of skilled and intelligent workers! The old adage, "A poor workman blames his tools," may be applied sometimes to the unsuccessful practice of amateur and professional photography.

Pride, if nothing more, should impel the beginner to sow well that he may reap a full photographic harvest. Let us suppose that we purchased a camera and presented it to a friend as a birthday-gift. Naturally, we



CLIMBING MT. RAINIER

DR. CLINTON L. DECKER

FIRST PRIZE — BEGINNERS' COMPETITION

would be interested to learn of his photographic progress and to see pictures that he made. If the results were poor and our friend failed to show enough interest to attempt to make good pictures, we would feel disappointed and rather regret that we had ever given him a camera. Were I to receive the gift from a friend, I should feel that I owed it to him, as well as to myself, to make a success of photography. At least, I should like to be able to show him *good* "snapshots," if nothing more. In short, I should make every reasonable attempt to have something to show for my photographic season. Moreover, I should make every attempt to master the rudiments of developing and printing; the use of the developing-tank and darkroom-methods of photo-finishing and the fundamental principles of correct use of the lens and shutter on the camera. Also, I should try to grasp the elementary rules that govern pictorial composition and the criticism of pictures. There is a tremendous amount of satisfaction in doing a thing when you know how to do it well.

To do things right may appear to be difficult and to involve much "useless" attention to detail. However, the fact remains that the beginner will have far more pleasure out of his photographic experiences if he tries to make a success of them than if he does not. We are all glad to help the man who is striving to help himself; but we lose interest quickly when there are signs of carelessness, neglect and a "I don't-care" spirit. Some may say, "This is all very well; but the vacation-season is no time to take anything seriously." Very well,

then, next winter when friends gather of an evening and ask about your vacation and the pictures you made, what will you have to say? They will accept a certain number of excuses; but if there are too many, your friends will be apt to lose interest and regret your inability to make good, photographically.

Others may say to themselves, "What is it to the Editors of PHOTO-ERA MAGAZINE whether or not we obtain good results?" In this connection my mind travels back over the years to an old Latin teacher who once said to me, "I lose nothing if you do not know your lesson. I have no college entrance-examinations to pass. The loss is yours, not mine. I am here to help you if I can; but if you will not study, there is no one to blame but yourself if you fail to pass the examination." If the beginner will not "study" and will not consider our well-intentioned suggestions, he has no one to blame but himself, when he later meets the bitter disappointment of photographic failure and has nothing to show for his time, effort and money.

Personally, I feel that those who read these lines each month are sincere in their efforts to make good pictures and to enjoy the practice of photography. It is the capacity to take pains that counts. He who does, will soon appreciate the difference between a "snapshotter" and the real amateur-photographer who delights himself and his friends with pictures that are beautiful and a credit to himself and to photography.

A. H. B.



"TRICKS"

W. J. BURELBACH

When the Building Faces North

THE most attractive side of many a building faces north, says a writer in *Kodakery*, and in the northern hemisphere, during the winter-months, this side receives no sunshine, but during the summertime it may be almost hidden from the best point of view by heavy foliage.

Such a subject can best be photographed in spring-time, just before the leaves come. From about April to September the sun rises north of east and sets north of west, and in the early morning or late afternoon it shines on the north side of buildings. Throughout the greater part of the United States and Canada the leaves on most deciduous trees do not fully unfold until sometime in May.

When photographing buildings be sure the camera is level. If it is pointed upward the building will be represented as tapering upward and leaning backward. When the vertical lines of the building are parallel with the right and left sides of the finder or groundglass the camera will be level and all the lines of the building will look right in the picture.

For a light-colored building, when the sun is shining brightly, between six and eight in the morning and five and six in the afternoon during May and June, give an exposure of $1/25$ of a second, using stop 8 on rectilinear lenses or stop F/11 on anastigmats. For a dark-colored building try $1/25$ of a second with the next larger (lower number) stop.

With the box type of camera, like those models of Brownies and Premos that have no bellows and do not need to be focused, and with focusing-cameras that have stops marked 1, 2, 3, etc., make the pictures not earlier than seven in the morning or later than six in the afternoon by giving a snapshot exposure, using the largest stop for light-colored buildings, and for dark-colored buildings place the camera on a tripod or some other rigid support and make an exposure of one second, using the smallest stop.

Another Home-Made "Contraption" to Wash Prints

MAKE a square, wooden frame of a size to just about slip over the upper rim of a zinc-washtub. Tack on to this frame common poultry wire-netting or fencing, with large meshes. Place this frame over the tub like a lid. Roll each wet print into a tube and attach a wooden film or drying-clip. Gently pushing this tube through netting, hang up by hook on side of clip. Tilt tub by means of small clip of wood about 2 inches high. Attach piece of old garden-hose—not very long—to faucet and push hose through meshes down to bottom of tub. Water now enters at bottom and flows out at top. Turn on water slowly, watching prints so as not to kink them by too great force. Wash $1\frac{1}{4}$ hours in stream of sufficient force but safe for the prints. A great many prints may be washed simultaneously in this way. For running water only.—H. H. KROENING.



THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



Stereoscopic Projection

AT the meeting of the French Photographic Society, held on April 22 last, says L. P. Clerc writing in *The British Journal*, a very interesting experiment in stereoscopic projection was made by M. Maurice Miet. He used a positive transparency made from the ordinary stereoscopic negative without the usual transposition. The image to be viewed by the left eye was projected on the right of the screen, and that to be viewed by the right eye, to the left. Stereoscopic viewing was obtained by crossing the directions of the ocular axes, namely, by looking at an object held for an instant at a short distance from the eyes. The new feature, in this experiment of M. Miet's, consisted in using, as this object, a card in which a square aperture was cut. A card of about half-plate size, with a square hole about two by two inches, serves well when held in front of the eyes at about 1-20th of the distance of the eyes from the projection-screen. Although this mask cuts off the two side images, which, in this mode of viewing usually enclose the central stereoscopic image formed by the superimposition of the two component images, it reduces considerably the strain of observation, and avoids the sudden separation of the superimposed images which readily takes place when this simple accessory is not used. The effect of relief produced in this way is positively striking; but is seen only by persons who have acquired the ability to see stereoscopically without a stereoscope. Moreover, it imposes a strain on the muscles of the eyes, as does the use of an improperly adjusted stereoscope. The members of the audience who, in these circumstances, saw the stereoscopic effect, were asked to raise their hands and were found to be in a minority. But there is no need to resort to projection in order to ascertain the absence of the power of seeing stereoscopically of the many people who prefer to close one eye when asked to look into a stereoscope. The process is so simple that it can easily be experimented with, and its repetition would interest many photographic societies so long as the exercise is limited to not more than a dozen views on the screen, so that there may be no excessive strain of the eyes.

To Make a U. S. System Diaphragm-Scale for a Pancratic Telephoto-Lens

THE following procedure, used for a Pancratic lens, may also be employed when making scales for other lenses, provided that the size of one stop is known and provided one has a diaphragm-shutter or a lens-barrel. Wanted: a divider and a compass to find quickly and without the use of elaborate mathematical apparatus the required size of stops U.S. 16, 32, 64, 128, 256 for a shutter-diaphragm, to enable one to stop down a medium-priced telephoto-lens (Pancratic) and to compete with an anastigmat telephoto-equipment in sharpness even when using large magnifications. Permanent largest stop in positive combination was F 12, or U.S. 9 (sufficiently accurate for practical use). Lens was removed from shutter, same opened on "T" and indicator diaphragm-scale moved (towards 16) to U.S. 9

(pointer set midway between U.S. 8 and $\frac{1}{4}$ the distance from 8 to 16). Opening of this stop (U.S. 9) was measured with divider: marked off on piece of paper as U.S. 9. Circle of same diameter was drawn with compass—preferably with ink. In the same way shutter-pointer was moved to every U.S. stop—16, 32, 64, 128, 256. Each diaphragm-opening was measured with divider and circle of same size drawn and designated with stop-value. This gave six circles in all, U.S. 9 to 256. Card with circles was set up and focused upon with lens, which was moved to and fro until circle U.S. 9, on card, was same size as U.S. 9 (F/12) stop of positive telephoto-combination. It does not matter whether circles are enlarged or reduced as long as the same-size rule is remembered. All circles were now measured on the groundglass and marked off on paper, each being automatically of correct proportions. Next, the diaphragm-scale of the telephoto-shutter was removed and a cardboard scale-plate of the same shape put in place or the old scale might have been reversed. The shutter was opened and the diaphragm-scale pointer moved until openings were of the same size as those on the groundglass (measurements kept on piece of glass), whereupon the proper stop-value was inserted under the indicator on the new cardboard-scale. One can now stop down the telephoto-lens used in the shutter and expose exactly, at the same time getting a snappy picture even with as great a magnification as 8 times. Of course each stop-value must be multiplied with the square of the magnification used, in order to expose correctly, thus: 4 diameter enlargement at stop U.S. 32 equals 4 x 4 (or 16 times) exposure at U.S. 32, and so on, up to 8 times magnification which means 8 x 8 (64x) normal exposure at stop given or used.

II. KROENIG.

Developing Overexposed Plates

ENOC H. BARKER, examples of whose charming pictorial work have graced the pages of PHOTO-ERA on several occasions, was invited to demonstrate his ability to handle overexposed plates before the members of the Photographic Club of Baltimore City, on the evening of June 10. Mr. Barker, than whom no worker in Baltimore excels in photo-technical methods, had previously requested the members of the club to bring plates of subjects that they had exposed from 1/5 to 20 seconds (outdoor-exposures) and submit them for development. Without knowing what length of exposure had been given to any of the plates submitted, Mr. Barker succeeded in developing every one of them, and in the presence of the members, with *one hundred per cent success*, thus showing that he had, at all times, absolute control of the process of development. All proved to be good negatives with excellent printing-quality. The only way the greatly overexposed plates could be distinguished from the others was by examining the back of the negatives which showed a decided gray tint, the printing-quality, however, being about the same in all. The demonstration given by Mr. Barker proved that, possessing the requisite skill and experience, the photographer can not only save excessively overexposed plates, but impart to them a successful printing-quality.



OUR CONTRIBUTING CRITICS



YOUR CRITICISM IS INVITED

Whoever sends the best criticism (not over 150 words) before the last day of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE. The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

THE picture this month provokes something of a smile. One can imagine that the photographer just happened along and, knowing the scene to be uninteresting, made the picture out of pure perverseness. It even appears that one of the seven apathetic people is laughing at the ridiculousness of snapping such a lifeless and unconventionally posed group.

PHOTO-ERA asks that contributing critics give constructive instead of destructive criticism. I believe that it is difficult to draw a sharp line between the two. It is all a matter of viewpoint. Specific condemnation certainly implies, if it does not directly state the suggestion for improvement, and it cannot be denied that at times it is more effective.

Here we would say that improvement could be made only by rearranging the whole group so that the various members do not appear so estranged. We can then obtain a genre of camp-life—in which case there should be a suggestion of action on the part of each and no one should look toward the camera—or we can make a record of a happy gathering (just what

it appears not to be). Then if we shift the camera to the right, so as to avoid including the glaring vista of the distant hills, and give the negative a little longer exposure, I am sure that we should have a much more pleasing print.

GEORGE A. BEANE, JR.

THE first thing that strikes the eye is the conglomeration of points of interest. If the picture were divided into three smaller pictures, a general improvement would result, the cuts coming between the boys seated on the table and the tree-trunk, and between the lady in the chair and boy seated at the left. The left-hand picture would then prove to be unusually good. The faces in the picture are very indistinct; and why only the hat of the man leaning over the table? Does not the fine dog deserve a better pose than by being cut in two by the leg of the table? There seems to be an indistinctness in the shadows, and also in the extreme view in the background at the right. Would not a longer exposure have helped to produce a better result? The lady in the chair might look better if placed more in the background and facing, at least partly, the camera.

JAMES R. FROW.

No criticism needs to be invited; it leaps out! My mother's teaching of the canon of good manners is



THE PICTURE CRITICISED THIS MONTH

torn to pieces. If the gentleman in overalls, at the left, would drop his paper and turn around, he would show an interest in what is going on. The man at the right seated with his leg crossed is a little too defiant in his smile; while the bunch on the table are almost hopeless, not to overlook the dog under the table. The nearest individual of this group might stand on his own legs, the one behind might raise his hat and let us see his face. The one next might be just as comfortable with *both* legs on the ground, and the last one would find that a tree makes a better background than foreground.

It's a jolly, easy-going party out camping. I should surmise; but better with the picnickers photographed seated on the rocks around the table with tree-trunk in the rear. The vista towards the right gives an open-air breath to the picture, and the trees (except the trunk as at present shown) give a good setting.

ARTHUR GILLAM.

THE author of this open-air group, intentionally or not, was trying to do too many things at one time. Consequently, none of them is sufficiently well done to merit special praise. While two of the members of the very scattered group are apparently unaware of the fact that they are being snapped, the others are so conscious of it as to render the group, as a whole, decidedly disconnected. The lady in the center, while she is by no means the center of "attraction," is the most striking figure in the picture. Her position, however, is neither graceful nor naturally easy, as is that of the boy at her left.

As for the independent group at the right, it lacks too much in definiteness and detail. Pray, what is supporting that hat there—just between the two men on the table? And, too, one of these men seems to be rather "up in the air"—and only on one leg, at that. And the man at the extreme right, while apparently happy, is almost entirely out of it all. More than anything else, the picture needs compactness and concentration in its composition.

Y. BILLY RUBIN.

A Hypo-Dissolver

As all amateur-photographers know, hypo is heavier than water, and, in consequence, when under process of solution, it lies at the bottom of the measure or jar and produces a saturated solution of hypo, which prevents the remainder of the crystals being dissolved; the upper stratum of water remains pure water unless it be vigorously stirred, states C. R. D. in the *Amateur Photographer*.

A much better method of dissolving the salt is to construct a small bag and suspend it inside the jar a little below the top. In this the hypo is placed, and then the container filled with the requisite amount of water. The hypo dissolves, and as it does so drops to the bottom. This goes on until the whole of the hypo is in solution, which happens more quickly and more efficiently than with the other method.

The framework is constructed of fairly stout wires. The circle to take the bag is bent first of all, and the two ends soldered together by means of tinman's soft solder. Two more wires are then soldered at opposite sides of the circle, also at an obtuse angle to it. The idea of these is to rest against the sides of the jar, and thus keep the net suspended at a convenient height in the jar.

The net is made of ordinary white muslin, and is sewn upon the frame like a fishing-net. It is a good plan to make the net to hold a definite quantity of hypo such as two or three ounces. When this is done, the worker can measure out the amount of water, according to the strength of solution required, and this makes for less trouble and a saving of time.

As it is probable that the pores of the muslin or other fabric used might retain traces of the hypo, which might contaminate any other solutions for which it was used, it is best to reserve the bag for hypo only. In fact, in the ordinary course of amateur-work, hypo is the only substance for which it is likely to be required; but there is no reason why a similar appliance should not be employed for the solution of other chemicals of a similar character, if need be, as, for example, potassium bichromate.



OUR ILLUSTRATIONS

WILFRED A. FRENCH



READERS OF PHOTO-ERA are already familiar with the artistic accomplishments of Herbert B. Turner and Ralph Osborne—fellow-travelers, boon-companions and participants in joys and woes, as they motored to and from Wolfeboro, the new home of the magazine, making pictures under conditions mostly unfavorable as to light and weather. For this reason, it would be unfair to point out the shortcomings of which these two erstwhile itinerant photographers are only too conscious. Nevertheless, these hastily made snaps—call them "impressions," if you like—will serve to convey a fair idea of a part of what Messrs. Turner and Osborne saw on their pilgrimage to Lake Winnepesaukee. The only way, however, to get adequate information of the scenery of the region visited, in part, by our two photo-pictorialists, is to get it on the spot. The way to reach the beautiful Granite State (New Hampshire) is by rail, motor or airplane. *Bon voyage!*

The view of a typical New England farmhouse, frontispiece, is attractive, filled with suggestion, and is well composed. If the wood-pile in the foreground were lower in tone, it would not conflict with the house in interest, and still fulfil its mission as a valuable accessory. The mass of foliage at the right would be of greater benefit to the *ensemble*, if it were less dark in tone. These things could easily have been accomplished by a bit of skilful work on the negative. Data: Oct. 17, 1920; 4.15 P.M.; fair light; Ica Ideal ($2\frac{1}{2} \times 3\frac{1}{2}$ in.); $3\frac{1}{2}$ -inch Color; at F/16; 5-time color-screen; 5 seconds; Ortho plate; pyro-soda; part of neg. enl. on P. M. C. No. 6.

That high-speed pictures can be made with artistic effect, has been demonstrated frequently in these pages. A happily arranged (composed) design is possible, if the photographer be an artist and comprehend the principles of composition and their application. Such an attempt appears to have been made in "Safe at Third!" page 71; perhaps, also, in the two pictures that follow, although with only partial success. In "Back in Time," page 73, however, we have a group of admirable, artistic proportions and perfect balance. With judicious trimming, yielding less space at the left and more at the right, and the beheaded umpire (not done by a disgruntled player) removed bodily, the picture would gain in artistic effectiveness. For data, see Mr. Lee's article.

Edward C. Day's "To Second!" page 74, shows the youthful catcher in an attitude favorable to a pleasing design. The artist has achieved a finely balanced result, although the critical beholder is likely to question his judgment in adopting the almost obsolete vignette. No one can fail to see the expression of energy and determination of the young athlete, who indulges a sport that makes for healthful exercise in Nature's vast arena. The picture was awarded Honorable Mention in Outdoor-Genre competition of September, 1919. Data: May, 1919, 4 P.M.; good light; No. 3 Cartridge Kodak ($3\frac{1}{2} \times 4\frac{1}{4}$); R. R. Lens; stop, F/8; quick bulb-exposure; Standard plate; M. Q.; enlargement, No. 4 P. M. C. Bromide.

"My First Photograph," by Rudolf Eickemeyer, page 77, testifies to the courage of the man, who, notwithstanding, continued to enjoy his pastime and progressed, until in a few years he proved himself to be a consummate and versatile artist. Our readers who did

not know PHOTO-ERA MAGAZINE in the early days of its existence, will undoubtedly be glad to gaze upon one of Mr. Eickemeyer's early triumphs, "A Summer-Sea", page 79. It was first published in the September issue of 1905, and together with a number of others of his artistic masterpieces—landscapes, portraits and genre, illustrated a beautifully written tribute to Mr. Eickemeyer's genius as an artist-photographer. Data to "My First Photograph"—title, "My Sister Apol"; made at Yonkers, N.Y.; February, 1885; between 10 and 11 A.M.; 5 x 8 Anthony Camera; 8-inch Platyscope lens; at F/16; with lens stopped down and using a slow plate, the exposure was necessarily long; Inglis or Munroe plate; pyro-soda; print on albumen-paper. Data to "A Summer-Sea": made at Barnegat, N.Y.; July, just after sunrise; 8 x 10 Flamming revolving-back camera; 14-inch Dallmeyer single lens; stop, No. 10; no color-screen; 1-12 second (Thornton & Pickard shutter); Seed 26 X; pyro-soda; Platinotype print.

"A Summer-Sea" was awarded first prize (a silver cup) as the best photograph by a member of the New York Camera Club. It was exhibited at the London Photographic Salon, and at various International Exhibitions abroad.

Please don't whistle, or Mr. Blumann's dog, "Hector", might respond. He is on the *qui vive*, ready for his master's call. The artist, Mr. Davis, has well expressed the dominant trait of man's best friend quite successfully, and with true artistic skill. Data: January, about noon; subject in sun; stop, F/11; Cramer Inst. Iso.; 1/20 second; camera held in hand.

Mr. Workman's placid view of a woodland-stream, page 83, is well chosen. The scene is laden with sunlight yielding pretty shadows. The perspective is admirable. Data: June, 4.30 P.M.; bright sun; 5 x 7 view-camera; 9-inch Verito lens; at F/16; 3-time color-screen; 2 seconds; Seed Non Hal. Ortho.; pyro, in tank; 11 x 14 enl. on Royal Bromide.

While praising Harold Gray for what undoubtedly is an excellent photographic copy of the painting, "The Marriage-Procession of Priscilla," page 84, I can only repeat what I have said several times, viz. that with respect to pictorial composition, the works of painters are not always safe for amateur-photographers to follow. The principles of composition are elastic, and painters depend as much on color as on drawing to obtain their individual effect of balance. Not being familiar with the picture (by Chas. Y. Turner) or its color-scheme, I cannot comment on the composition as a whole. The artist cannot help escaping censure, however, for his blunder in placing the Pilgrim maiden on a steer, white or any other color, when, as a matter of historical fact, there was not a cow, nor a steer, in all New England at that time! Artistic license has led this imaginative painter far astray—thanks, he may say, to the poet Longfellow, who is responsible for this "pretty bit of fiction." Print was awarded Honorable Mention in "Copying Works of Art" competition, last March. Data: March 7, 1921; 11.30 A.M.; bright sun outside; 5 x 7 view-camera; 7-inch Goerz Dagor F/6.8; at F/11; 3-time color-screen; 10 seconds; Eastman Portrait-Film; Rytol, in tray; enl. on Eastman Portrait Bromide, White, D.

Remarks by Mr. Gray: "It may be of interest to some

of your readers to know how I develop papers this size and larger, using only 8 x 10 trays. As I am in a boarding-house, I have no darkroom and have to wait till night which makes a darkroom for me. If I am making an enlargement larger than 8 x 10, I make the exposure on the paper and then soak it in clean water, after which I lay it on a piece of glass a little larger than the paper. Then I put one corner of the glass in the tray, and with a piece of cotton swab the developer over the paper. After development, fixing and washing can be done in the same way. This is not new; but it may be of help to some that have no large trays, and room for them."

Advanced Workers' Competition

PROFITING by his sense of proportion and the value of chiaroscuro, Mr. Wendell has produced a highly interesting and effective street-scene, page 87. He showed good sense in making the exposure when the pedestrians were entering the picture, and not leaving it. It is to be regretted that the superb tone of his print could not be reproduced. Data: scene in Denver, Colorado; March 28, 1921; 12.30 p.m.; bright sun; Ica Atom camera; $4\frac{1}{2}$ x 6 cm.; $\frac{2}{3}$ -inch Carl Zeiss Tessar F/4.5; used at full opening; 1/50 second; Hammer Non-Hal.; Rytol; in tray; 8 x 10 enl. P.M.C. No. 8 with soft-focus lens; Elon-Quinol.

The quaintness of the old Bavarian city, which captivates every tourist who visits it, did not fail to impress Donald R. Battles, although his print lacks a measure of distinctness in definition. His patience in awaiting a favorable moment, so far as the pedestrians are concerned, appears to have been rewarded. Data: September, 3 p.m.; dull light; $2\frac{1}{2}$ x $3\frac{1}{2}$ Adams Vista Camera; Ross-Zeiss Tessar Ic.; $\frac{4}{5}$ -inch focus; at F/6; 1/10 second; Premo Film-Pack; Rodinal, bromoil print.

Despite the unavoidable line of electric-light poles, Gertrude Bennett's "Late Afternoon on Broad Street" (Philadelphia), page 89, is an excellent street-scene and, incidentally, an impressive architectural group. One of the features that the critical beholder would wish altered is the bright side of the church, at the extreme left. As it would not be right to lower this accessory in tone in order to make it less obtrusive, the view could be made again, but earlier in the day when the street-side of the church is in shadow or partly so. Perhaps, it would be possible to take advantage of the shadow cast by the lofty City Hall tower at the propitious time. Data: Ernemann camera (9 x 12 cm.); film-pack. Other data not given.

Beginners' Competition

For an M.D. to produce so excellent a result, with a total camera-experience of less than two years, and without any assistance, whatever, as is shown on page 93, is an achievement to be proud of. Technically, at least, the picture is admirable, the tonal gradations being correct, the aerial perspective good and the general arrangement worthy of high praise. The foreground including the tourists is specially commendable. Data: Sept. 15, 1920; sun shining through light clouds; Eastman Portrait-Film; Artop, $6\frac{3}{4}$ -inch B. & L. Protar VIIa, F/6.3, No. 7; stop, F/8; 1/25 second; print, Artura Carbon Black; M. Q. Tubes (Eastman).

W. J. Burelbach's snapshot of a jumping pet-dog, page 94, is cleverly done, the attitude of the animal, while in the air, gracefully happy. Data: July, 3 p.m.; bright light; No. 1A Special Kodak ($2\frac{1}{2}$ x $4\frac{1}{2}$); $\frac{5}{8}$ -inch Kodak Anastigmat; stop, F/6.3; 1/300 second; Eastman roll-film; pyro, in tank; enl. on P. M. C. No. 6.

Our Contributing Critics

THE friend who permitted the hastily made view (page 96) to be published and to be criticised "without mercy," failed to supply the data. Even so, our assistant critics need not hesitate to "lay it on." The picture has little claim to beauty or merit.

Brewster Free Academy

IN connection with the full-page illustration, "Wolfeboro Bay from Brewster Free Academy" in this issue, it may not be amiss to mention a few facts with regard to this unique free educational institution.

Brewster Free Academy was named for Mr. John Brewster, by whose bequest it was liberally endowed. It continues the life of the Wolfeborough and Tuftonborough Academy, which was chartered in 1820, and which maintained its corporate existence until its charter was amended and its name changed in 1887 in accordance with the will of Mr. Brewster, which stipulated that the name "be changed, and thereafter continue to be that of Brewster Free 'School' or 'Academy.'" The will further required that "no restriction (shall) be placed upon any person desiring to attend and receive instruction from said school or academy on account of his or her age, sex or color, provided only he or she is of good moral character," and that instruction in the academy should be "as nearly as possible free."

Following the instructions of the will of John Brewster, the trustees secured for a campus a particularly suitable tract of land, comprising more than forty acres, sloping gradually to Lake Winnepesaukee, with a shore frontage of half a mile. No more beautiful situation could be found in New Hampshire. Upon this campus a building of the English collegiate type was erected in 1887. It was designed to be a part of a much larger ultimate structure, which might not only serve the use of a modern and growing academy, but also suggest something of the historic educational traditions. This building was destroyed by fire in 1903. Two years later the present building, fireproof, and thoroughly modern in every particular, was completed and formally dedicated.

To the Brewster Free Academy, the townspeople of Wolfeboro owe an ever-increasing debt. Without it the town would lose much of its young life, music, educational advantages and influence for the good of the community.

A Correction

A LETTER FROM Mr. Charles W. Long, author of the illustrated article, "An Attempted Photographic 'Come-Back,'" in the June issue informs us that the title of the picture, on page 295, should be "Yellow-Breeches Creek" not "Yellow Birches." Mr. Long says, "I wish that you would kindly inform the readers of PHOTO-ERA MAGAZINE that it is my poor chirography and not my ignorance concerning trees that is responsible for the sycamore being labelled 'Yellow Birches.' The picture was made near the summer-home of Vance McCormick, on the Yellow-Breeches Creek at Rosegarden, Cumberland County, Penn. The title refers to the creek, not to the trees."



If a man says there are faults in your prints, respect him; if he says there are none, suspect him.

A. SEAMON STER.



ON THE GROUND GLASS

WILFRED A. FRENCH



Frederick C. Davis' First Photograph

THE entertaining series of stories entitled "My First Photograph," and begun in the July issue of this magazine, has entailed correspondence of much interest to the Editor and to the numerous workers who have been approached on this subject. Naturally, only a few veteran pictorialists have preserved the negative or the print of the first photograph they have ever made; consequently, they are unable to furnish a story that otherwise might be illuminating and instructive.

Among those who were asked by the Editor with what success they had initiated the first period of their photographic activity, was Frederick C. Davis, a man who is nothing if not practical and to the point. In referring to his positively first photographic venture, he sent the Editor an interesting letter and enclosed, for the latter's "benefit," a sealed envelope containing a print of his initial photographic attempt, leaving to the Editor's judgment whether or not he should contribute his story, "My First Photograph." On opening a carefully and hermetically sealed envelope, the Editor withdrew from it a 2½ x 3¼ print. It was absolutely and uniformly black!

The Editor appreciates Mr. Davis' little joke; but as the readers of PHOTO-ERA MAGAZINE have known, for some time, Mr. Davis is a practical photographer and is not very apt to produce blanks in his photographic experiments.

An Alluring Travelog

It is always gratifying to the Editors of this publication to learn that advice given by its contributors is accepted and followed. This is as it should be. Sometimes, the well-laid plan for the purchase of an equipment or the adoption of a technical process undergoes a radical change, owing to some practical and timely article by an expert worker who tells his story in these pages.

Early during the year, one of our valued subscribers, Mr. Lowell Clapp, the technical head of the firm of Otis Clapp & Sons, high-class pharmacists of Boston, U.S.A., was about to carry out a long-cherished plan to visit Puerto Rico, when he read the interesting and alluring article by Herbert B. Turner, "The Camera in the Windward Islands," published in PHOTO-ERA MAGAZINE, December 1920 and January 1921. Unable to resist the captivating influence of Mr. Turner's delightful travelog, Mr. Clapp abandoned his plan of spending several weeks in congenial Puerto Rico, following in every detail the journey made and described by Mr. Turner. Being an accomplished photographer, Mr. Clapp took his camera with him and brought home a number of interesting views as souvenirs of that very delightful journey to the Windward Islands.

There may have been others who profited by Mr. Turner's delightful description of his journey to the West Indies; but they could scarcely be more enthusiastic than was our esteemed subscriber and enthusiastic camerist, Mr. Lowell Clapp.

Another Replica

MY DEAR MR. FRENCH: Please excuse me; but I have just got to send you this. In the *Century*, for March, in an article entitled, "American Literature," by St. John Ervine, occurs the following:

"In America one village is almost an exact replica of another village."

I have often thought that if a person was so familiar with another language that he could express his thoughts in it better than in his own, and if the one to whom he was trying to convey his thoughts was equally familiar with it, it would be well for him to use it. Otherwise, it seems as if he were trying to "show off."

I agree with the old parson who was also opposed to this sort of thing and who said, "Now, St. Paul didn't use no dead language; he used the plain Anglo-Saxon," and I also like the member of the Legislature who, in a speech, protested against the use of Latin by the members in their speeches. "Yes," he says, "I object to it in toto."

I expect that with all the troubles of war-time, changes and uncertainty of prices, labor-troubles and strikes, you have had more than one man ought to do for the past four years, and that editing PHOTO-ERA is enough for one man.

Wishing you good health and prosperity,

WILLIAM H. BLACAR.

The Stamped Return-Envelope

From a friendly cotemporary, we quote the following: "We have to thank the erudite Editor of PHOTO-ERA for having provided the very useful and now indispensable term, 'photo-finishing,' which takes the place of the attenuated form of developing, printing and, maybe, enlarging of the amateur's exposed plates or films. May we not now look to the same source to supply a short substitute for the much-used expression 'a stamped and self-addressed envelope'?"

We appreciate the compliment, and shall be glad to try to carry out the suggestion of our confrère; but inasmuch as the order is a large one, we shall exercise no haste in the matter. Indeed, we shall be interested to see what others, including our intelligent readers, may have to offer on the subject. For the present, however, may we suggest that "a stamped return-envelope" be considered as a temporary substitute? The usual envelope with the address of the sender printed thereon, but bearing no stamp, is very useful; but with the necessary postage-stamp affixed, it is a still greater convenience, besides serving as an inducement to make an early reply.—EDITOR.

Home-Made

PUBLISHER TO EDITOR OF A RIVAL PAPER: "You have the nerve to reprint one of our jokes without giving credit to the source!"

Came the reply: "DEAR CONFRÈRE. You never give any credit, yourself; so why should I?"



ANSWERS TO QUERIES



J. L. K.—The Wolfe Artistic lens is an outgrowth of the well-known Smith Semi-Achromatic soft-focus lenses. It is an adaptation of the same general idea of diffusion; but designed for use on small hand-cameras. It is in the form of a supplementary lens that slips over the lens already on the camera. We have seen pictures made with it and we believe that the Wolfe Artistic lens will prove to be a valuable and welcome addition to the photographic equipment of amateur photographers. Further particulars may be obtained by writing to Pinkham & Smith Co., 292 Boylston St., Boston 17, Mass.

C. K. H.—The following starch-paste formula will be of service: Rub up one part of good white starch with two or three parts of cold water into a perfectly smooth cream-like paste; and, then, with constant stirring pour this into from six to eight parts of boiling water and continue the heat for five minutes, stirring constantly. Allow to cool; and, if not free of lumps, squeeze it through muslin. Another plan is to rub the starch into a paste, as above, and to pour boiling water upon it, stirring constantly until it jellifies. All starch-mountants should be allowed to cool and the top skin be taken off before use. Such pastes keep good for two or three days only; but the addition of a few drops of oil of cloves or carbolic acid will preserve them for a longer period.

In reference to your inquiry regarding **how to avoid reflections in a show-case**, which come from the opposite side of the street. We know of no way in which this can be accomplished unless it is possible to place an awning over the front of the store or directly over the show-case. If the reflections are caused by sunlight, this will, no doubt, be a satisfactory remedy. However, if the reflections are caused by artificial light, such as ordinary lighting-fixtures in the street, it is possible that the awnings could not be placed low enough to overcome this effect. We know of no other manner in which this difficulty can be obviated.

F. J. K.—We regret not to know of what Hypono is composed, but it is undoubtedly one of the Peroxides, although not H_2O_2 . It has no bad effect on the film, except when used too strong with soft water when it has a tendency to soften the film. This is remedied by using it at half strength. However, the average user will find that Hypono may be used successfully by following the directions explicitly.

J. S. R.—With regard to a Bausch & Lomb Plastigmat F 6.8 lens as compared to the newer low-priced F 7.5 lens, we beg to state that if you intend to confine your photographic work within the scope of an ordinary roll-film camera, and do not intend to use the lens to copy, enlarge, do telephoto or wide-angle work, we believe that the lower-priced F 7.5 lens will meet your requirements efficiently.

On the other hand, if you intend to do several kinds of photographic work with a long bellows-extension, rising-and-falling front and other attachments for serious photography, we believe the B. & L. Plastigmat will serve you to better advantage. The F 7.5 lenses are specially made for use on roll-film cameras, and for that purpose they are in most respects equivalent to the high-priced lenses; but should you use one of these

lenses on a different equipment, such as a high-grade long-extension plate-camera, the lenses would not cover satisfactorily, nor would they serve you as well.

M. K. W.—It is not necessary to cut apart roll-film negatives to dry. It is customary to keep the negatives in the strip until developing, fixing, washing and drying are finished, then each negative is cut off ready to print. Some prefer to cut the exposures in order to develop each negative by itself. However, this is no particular advantage unless the various exposures are of such a nature as to require individual attention. The modern developing-tank and the correct amount of developer will usually take care of all ordinary variations of exposure.

D. M. D.—It is true that extreme wide-angle lenses seem to distort the image. However, this is in reality not true, for a wide-angle picture held at the same distance from the eye that the plate was from the lens when the view was taken will look correct in perspective. Since it is not pleasant to view a print at only four or five inches from one's nose, it is wiser to select a lens of a more reasonable focal length.

J. W. F.—It is entirely possible to make animals take their own pictures. One method is to secure the camera firmly and focus sharply on some definite spot—as the base of a tree. When everything is in readiness, fasten a piece of meat or other bait to a strong cord and place it where you wish the animal to be. By means of screw-eyes or other device the string can be carried to the camera and so arranged that a pull on the string will release the shutter.

C. M. B.—Frilling of films is exceedingly unusual as a rule, except in the case of a few brands which are quite thin. Most of our American films are backed with an unsensitized coating, which does much to prevent frilling and curling. The use of a fresh acid-alum fixing-bath ought to prevent frilling in the wash-water. If not, a hardener, such as formalin, may be employed at any stage of the work, even after development and previous to fixing, if that seems necessary. The solution should contain 1 ounce of formalin to 20 ounces of water, in which the film should be immersed 15 minutes. Be sure that the solution is distinctly alkaline, as neutral and alkaline solutions have very little hardening effect. Of course, you doubtless realize that a chrome-alum fixing-bath has greater hardening-properties than one containing ordinary alum. Probably, also, you know of the various hypo-eliminators by means of which long washing in warm water may be avoided. Of them all, potassium permanganate is probably best.

L. W. B.—The mottled condition of the sky in your plates is probably due to failure to rock the tray sufficiently during development. When this is not done the solution acts unevenly, and such a condition as you describe is the result.

B. F. B.—There is hardly a better surface on which to trim prints than the film-side of an old glass-negative. It does not dull the knife as quickly as the plain glass, yet it gives a smooth, firm resistance. A sharp knife, a transparent square and an old negative make an excellent substitute for a more elaborate trimming-board.



EVENTS OF THE MONTH

Announcements and Reports of Club and Association Meetings, Exhibitions
and Conventions are solicited for publication



MUNICIPAL GROUP, SPRINGFIELD, MASS.
THE PLACE OF THE NEW ENGLAND CONVENTION

Convention of the Professional Photographers of New England

THIS wide-awake and progressive association of professional photographers will hold its twenty-third convention at Springfield, Mass., on Sept. 7, 8 and 9, in the magnificent Auditorium which has splendid conveniences of space and light.

One of the features will be a studio, fully equipped and operated by some of the ablest men in the country, so that any man or woman who attends the convention may have a first-class negative made of themselves to carry home: a thing not possible unless they went to a great deal of trouble and expense. These sittings will be made by appointment, and will serve to illustrate how great men in professional portraiture proceed in making their masterpieces.

There will be lectures and business-talks by competent specialists, and also the usual amount of entertainment, consisting of music, dancing and a clambake.

A very cordial invitation is extended to the ladies for whose comfort and entertainment special arrangements will be made. No effort will be spared by the committee to make every visitor feel at home, contented and happy. Now is the time for those who are interested to make their plans and arrangements.

Springfield has been selected by the committee because it can be reached easily by the photographers who live in various parts of New England. Springfield is fortunate in having splendid and well-managed hotels with modern conveniences and at moderate prices. No city in this country possesses an Auditorium the equal of the one that has served for the last five years as the meeting-place of the New England photographers. Those who have been there are always glad to go again. For those who care to make brief and delightful motor-trips from Springfield, there are attractive places within easy reach north and south along the Connecticut River, west to the Berkshires, and north to the Mount Holyoke range.

Frank S. Noble

It is our sad duty to announce to PHOTO-ERA readers the death of Frank S. Noble, vice-president of the Eastman Kodak Company, at his home in Rochester, N.Y., July 5. To those who knew him intimately and who witnessed the conscientious, persistent and untiring energy that he put into his war-work, it is evident that Frank S. Noble was as much a victim of the great conflict as if he had fallen on the field of battle. For more than a year, he served as Director of Production of War-Munitions in all of New York State, except Greater New York. During all that time, he gave unceasingly and unsparringly of his best powers—a rare exemplification of ardor and patriotism. In consequence of the strain, after his resignation at the end of the war, he was ill many weeks. He then resumed his official duties with the Eastman Kodak Company, and regained his former health and vigor. But the previous exertions had affected his heart, so that when the greater call came, it came after a normal day spent at the office and an evening with his family.

Frank Noble was a well-known figure in the photographic business, having passed his earlier years with the old New Jersey Aristotype Company. He first became associated with the Eastman Kodak Company as manager of the Chicago branch. In 1904, he was called to Rochester, to become assistant-treasurer and, later, vice-president of the company. During his twenty years of service, he made many friends and formed strong and lasting friendships, which was not difficult for a man possessed of endearing qualities—the concomitants of a fine character and inspiring personality. As a citizen of Rochester, he was eminently identified with every enterprise initiated for the improvement of the city. He was ever ready to contribute his share, and even more, in all charitable and altruistic work; so that there, and in the vast organization of which he was a part, his memory will long be cherished. To every one who knew Frank Noble, will come the thought, "I have lost a friend."

W. A. F.

Oakland Salon of Photography 1921

We are pleased to call the attention of our readers to the Oakland Salon of Photography, 1921, which is to be held under the auspices of the Oakland Art Association, Photographic Section, October 30 to November 26, at the Municipal Art Gallery, the Civic Auditorium, Oakland, California. We note that the Jury of Selections includes the names of Mr. John Paul Edwards and Mr. Edward Weston, both of whom are well-known to readers of PHOTO-ERA MAGAZINE. The last day for receiving prints is October 3, 1921. Conditions of entry and entry-forms may be obtained by writing to Edwin S. Culver, Secretary, Oakland Salon, Municipal Art Gallery, Civic Auditorium, Oakland, California.

A New England Farmhouse

Among the pictures that received Honorable Mention in our Architectural Subjects Competition, in October, 1920, was "A New England Farmhouse," by Stephen Marsh. It made a favorable impression on account of the artistic and pictorial treatment of a simple subject. The house is seen slightly beyond an overhanging maple, with its full, rich foliage. As the picture was delayed in the mail, it was not included in the Honorable-Mention list; hence this tardy acknowledgment.

Photographers' Row, Boston, U.S.A.

ON account of the numerous photographic studios that may be found on Boylston Street, Boston, beginning at Washington Street and extending as far as Massachusetts Avenue, the street has become known as "Photographers' Row." Although this section of Boylston Street corresponds to only a very small fraction of Fifth Avenue, New York City, which boasts the largest number of first-rank studios in the metropolis, it contains, estimated roughly, thirty studios, among which are such high-class ones as Garo, Orrin Champlain (recently established branch, conducted by Ben Eichelman), Frank A. Place, The Horsman Studio, C. A. Hoyle, Shervet Studios, Mary Patten, Vantine & Atren, and others.

Help Your Dealer

If an amateur-photographer takes an interest in the success of his photo-dealers, what better service can he perform than to invite his attention to the advertisements in PHOTO-ERA MAGAZINE? The goods advertised therein enjoy a wide popularity on account of their established excellence, which is also guaranteed by the publishers of this magazine.

A Classical Criticism

GEE WHIZZ! but I'm crazy about pictures. Dad is bug-house, too. He takes PHOTO-ERA MAGAZINE. He's hipped on it; that's why I see it sometimes. Say! that picture in May was a bear, and yet they jumped on it. That picnic-party in June hits me on the right spot, but some of the bunch are soreheads. What ails them, anyhow? I'm no shark at criticising pictures; but my dad calls himself a photo-picturist. He says I'm a bird, and wants me to send this in. Gosh! but the boy reading the paper all by himself gets my goat. What's the matter with him? He must have a grouch on, or he'd join the gang which is all split up. Gee whizz! lamp that boy with his hoof on the lunch-table, and the only skirt in the bunch seems to have the willies. Perhaps they are waiting for the feed. I'm on; maybe the cops lit on 'em all of a sudden, and pinched all the booze. Just the same, the guy on the right hogging the only chair must have had some. Just watch him. He and the dog under the table are the only happy ones in the bunch. Dad says my criticism is not constructive (whatever that is). He says it's a roast, but to send it just the same and he'll apologise to you folks. I don't see why.

T. D. LAMPEER.

Individual Photo-Finishing

It is not always easy to maintain a high standard of excellence in a vocational activity, for it requires constant vigilance, thought and effort. Even then, the person who does the actual work may fail the employer, as it is humanly impossible for the latter constantly to watch every step and every movement of his employee. He is obliged to trust to the honor of others. When he finds that his faith has been misplaced, he makes a change. Even this is not always feasible.

If the professional photo-finisher is not skilled, conscientious and vigilant in looking after the needs of his customers, or in maintaining his own high, technical standard, and eventually drives away his amateur

patrons, he may, indeed, style his business, "amateur-finishing," for he has "finished" the amateur as a customer.

We publish below a letter, which is one of the many that we have been receiving of late, and shows that some photo-finishers start well, but, after a while, become careless and, in lowering their standard of work, lose valuable customers. We advertise, so far as we can, the names of photo-finishers whose reputation as high-class workmen has impressed us as genuine, and recommend them to those of our readers who are occasionally unable to photo-finish their own work.

EDITOR, PHOTO-ERA MAGAZINE, *Dear Sir:*

For many years, I did all my own developing and printing, but now, through pressure of business, I find I do not have the available time. In this respect, I wonder if you would be kind enough to suggest to me some person or concern who is competent to do really first-class work. I find that the ordinary commercial photographer around town, more or less, spoils what otherwise might be good work. For a number of years, I sent a certain amount of work to ———, of ———, N.Y., but find that his work also has lately dropped off. I would be only too glad to pay materially above the market-price provided the work was of a first-class order.

Yours very truly,

E. A. W.

JULY 11, 1921.

Professor Gabriel Lippmann

PROFESSOR LIPPMANN, who passed away July 12 last, was professor of physics at the University of Paris. In 1891 he discovered a process of photography in natural colors. In 1908 he was awarded the Nobel Prize for his services in physics. He served as professor at the University of Paris since 1878. He annunciated the principle of the conservation of electricity, and contributed in an eminent degree to the development of photographic science. His process of color-photography, in which the phenomenon of stationary or standing waves is realised, consists in exposing a transparent emulsion in contact with a reflecting surface, such as mercury.

Herbert W. Gleason's Trip

HERBERT W. GLEASON, the well-known photographer and lecturer, also Superintendent of the American National Parks, has a busy summer—but it is work combined with pleasure. July 1, he went to Yellowstone Park with F. L. Olmsted, the well-known landscape-architect, Desmond FitzGerald and H. B. Kelsey, visiting the localities threatened with commercial invasion and procuring data for use in Congressional hearings when the subject comes up for discussion, next winter. The subject of destroying valuable forests and beautiful scenery in the interests of purely commercial enterprises has already been mentioned in PHOTO-ERA MAGAZINE, and should enlist the practical sympathy of all camerists and photo-pictorialists in this country.

While the other members of the party will attend to the engineering-questions, Mr. Gleason will procure a large series of photographs to be used later in publicity-work and in his lectures.

From Yellowstone Park, Mr. Gleason and Mr. FitzGerald will make an extended trip through the wonderland of southern Utah and along the north-rim of the Grand Canyon of Arizona, which latter region contains the climax of colorful scenery of America, and Mr.

Gleason hopes to get some valuable trophies. Mrs. Gleason will accompany her husband and make color-sketches and take color-notes of many of the places to be photographed.

The Memphis Exhibit of Photography

A NUMBER of artists have collaborated and hung an exhibit in the Brook's Memorial Art Gallery. About thirty entries are made, comprising over one hundred pictures.

This is the third year that the exhibit has been held, the pictures having been sent from Tennessee, Mississippi and Arkansas, principally, including a few from points more distant. Notable among the artists are Gilmer Winston of Memphis, with a fine display of landscapes; Harry Wilson, marines, and "Ye Olde Barn Studio" of Mississippi with genre studies. Edward B. Collins of Des Moines, Iowa, is represented with some artistic diffused focus landscape-work, and E. L. Harrison of Memphis, by animal-studies and landscapes. The most characteristic note in the exhibit is the work of Dr. George consisting of Canadian Indian studies picturing the idyl, "Hiawatha."

One cannot but be impressed by the versatility of the material. In one corner, we see sepias of the pyramids with the Nile peacefully reflecting their angles. Neighbor to this is the shining face with gleaming teeth of one of our old Mississippi darkies strangely undisturbed by the threatening fangs of the Numidian lion close beside. The sun strikes through the branches of a woodland-scene, in sharp contrast to the stormy sky of a sunset over the "Father of Waters," while above all the painted savages dance with brandished weapons. If there is any criticism, it is that the hanging and the grouping shows the amateur-hand; but who is particular in a photographic pictorial exhibit, anyway? What's the use?

E. L. HARRISON.

Autochrome Plates

THOSE who have seen the play, "Kit, the Arkansas Traveler," will remember the scene where Kit was asked why he did not repair the leak in his roof to prevent the rain from coming in. Continuing to play his banjo, he said, sententiously: "When it rains I can't fix it; when it doesn't rain, it don't need fixin'."

In the winter when there is only a moderate demand for Autochrome plates, they can be had in plenty; but it happened that during last July, when there was a great demand for Autochrome plates, they were temporarily not available. The reason for this was that France, too, had her troubles, and the Autochrome factory, at Lyons, did not escape. Fortunately, the interruption was only temporary, and we are informed by the American Agent, in New York City, that shipments of these popular plates for color-photography were expected the latter part of July, and all orders would be filled promptly, either through the regular photo-dealers or directly from the American Agency, at 75 Fifth Avenue, New York, N.Y.

In Embryo

"OUR new dry-plate company is capitalised at \$5,000,000."

"Great! Let me see your prospectus."

"Oh, we haven't got out a prospectus yet. The confounded printer wants his pay in advance."

Boston Transcript.



LONDON LETTER

CARINE AND WILL CADBY



THE NAMELESS EXHIBITION of Paintings, at the Grosvenor Galleries, has more than a sister-art attraction for photographers. This show has been organised by recognised authorities on art, and Mr. Charles Sims, R.A., Prof. Henry Tonks, and Mr. Roger Fry, men of widely divergent opinions on painting, were asked to select and arrange the pictures. The works are all anonymous, and not until the 16th of June will the identity of the authors be divulged. In choosing the pictures, the Hanging-Committee divided the British artists roughly into three groups—the Academic, the Intermediates, and the Modernists, and each chose from the school he represented what he considered the best works available.

So here we have examples of the most divergent schools of contemporary British painting, hanging side by side. They make a very interesting and thought-inspiring show. Now, if photography could organise a similar exhibition, and let the public indulge in a guessing-game as to the authors, till near the close, it would, no doubt, make for liveliness and also do a great deal of good. Many known workers would be recognised, and some of the pictures of imitators might even be placed to the credit of masters in particular styles; but it would also give beginners a fair chance of proper appreciation where no names were in evidence. Honest opinions could be formed without one eye being kept on established reputations, and it would be all to the good.

Bad as the present times are, things move; and now it seems that the living bacteria are to be indulged by having their individual photographs "taken." This is made possible by the new microscope devised by Mr. J. E. Barnard, and is likely to lead to new and far-reaching possibilities in the treatment of infective diseases. One wonders whether the patient will be presented with a beautifully enlarged portrait of his own pet microbe to hang on the wall as a lasting memento of a conquered enemy!

Possibly, it is the personal element that is attracting people to the Royal Photographic Society's rooms, just now, to see the special parts of their anatomy which have been X-rayed. No one would have imagined that an exhibition that consists entirely of X-ray pictures would so interest ordinary photographers; but owing to the clever arrangements, side by side, of early and quite modern work it was shown clearly how much this science has advanced of late years. During the war, many well-known photographers devoted themselves to it. Miss Constance Ellis was one; and so fascinated did she become, that her child-photography has been sacrificed to hospital-work.

One ought to call this period the renaissance of photographers, not actually of photography—that probably is in the very near future—but we keep hearing of fresh activities from photographers. The Friday Discussion Meetings at the Royal are an emphatic success, and it is a sound scheme that gives the introducer of the evening's subject ten minutes to propound it, and each other member five minutes in which to discuss it. Very soon we shall be able to say *only* five; but at present there is not that snatching at opportunity to discuss matters that there probably will be, once the discussions have got into their stride. As

one member informed us, the difficulty was to get anywhere near the five minutes' span instead of feeling its limits.

The other evening, however, when Mr. John Warburg opened the ball with a stimulating talk on "foregrounds," Mr. Crowther replied in such an able manner that he was allowed not only to exceed his limit, but was asked by the members to start a subject of his own at a subsequent discussion.

The Kodak Club has also resumed its meetings, and the first one this year was opened by an amusing introductory speech by Mr. Wastell. This time of year, however, these fortnightly meetings are developing into country-outings, when one is quite certain that every member carries a Kodak!

Talking of Kodaks, a very interesting booklet has been published of the members of the cast of "The Beggars' Opera," that old English play, performed in the old English style, which, defying all prophecies of failure, has been an enormous success and has run for over a year. There are twenty-four full-page reproductions of the players, the photographs for which were made by Mr. Alan Trotter (a member of Maecheth's Gang). At a casual glance, one would say that they were reproductions of clever paintings, but they are better than that, for they are what paintings often are not, viz.: speaking likenesses of those portrayed in their particular parts. And yet there is all the quality we photographers so often evasively refer to as belonging to paint. They do not even seem theatrical or in any way retouched. If they have been, it is so well done that it does not show. Each portrait is a delight, artistically. Lighting, pose, texture and general composition are such that, almost at random, one could select a print for framing, and not tire seeing it again and again hanging on the walls. This is high praise, but it is not too much, and in our ignorance we have never even heard of Mr. Alan Trotter as a portrait-photographer.

But the most startling surprise of all is laconically conveyed on the opening page of the book, where we read that the photographs were made with a Vest-Pocket Kodak! Old hands as we are, we must own to being startled. One's mind jumps from the photographer to the camera, and from the camera back to the photographer, and we can only exclaim, "wonderfully clever!" What more does one want to do with a camera? Give me a Vest-Pocket Kodak! Having arrived thus far, we see what a splendid advertisement it must be for this little wizard of an instrument; but at the same time—and, again, as old and fairly experienced photographers—we know that the man behind this camera is an artist of distinction, and that he was the master of the little wizard he so cleverly used.

Those Girls

FIRST GIRL (showing photograph of her *fiancé*)—"I'm sure you can't call him handsome. His nose is too big, his eyes the wrong color, and he has a weak chin."

SECOND GIRL—"Goodness! You expect a man to be a regular Venus!"—Adapted.



BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished by us at the lowest market-prices. Send for our list of approved books.

BOOK OF PHOTOGRAPHIC ENTERTAINMENTS (Photographisches Unterhaltungs-Buch). By A. Parzer-Mühlbacher. Fifth edition. 207 illustrations. Large octavo. Complete alphabetical index. Weight, without packing, 24 ounces. Cloth, \$2.00, postage extra. Berlin Union Deutsche Verlagsgesellschaft, 1920.

This entertaining volume illustrates sixty-six different photographic exposures—including every possible photographic experiment, serious and humorous, but all practical. The contents includes many experiments that belong to the realm of trick-photography, being used merely for entertainment, such as double exposures representing the photographer engaged in games and other activities with himself; spirit-pictures; self-portraiture under various conditions; distorted portraits of self and others; and many other humorous experiments that are practical and easy of accomplishment. Naturally, there is the serious side of photography, including every sort of exposure indoors and out; the making of silhouettes; postage-stamp portraits; portraiture in imitation of marble-busts; stereoscopic photography; X-ray pictures; jewelry-portraits; high-speed pictures—in fact, the entire gamut of serious photographic work. Every exposure, of whatever nature, is accompanied by a material illustration, including twenty-two full-page plates. Though the work is in German, it should interest many of our readers, including those who are in a position to have any or all of the experiments translated into English.

"Operating for Photo-Engraving Process"

THERE are a number of excellent works on the subject of photo-engraving; but these are often too technical and scientific for the beginner or the general reader. Professor C. J. Killen has issued a second edition of his little book, "Operating for Photo-Engraving Process." We have given this book a careful examination and we agree with Professor Killen, when he says in his preface, "This little booklet is written especially for the beginner and gives in plain language, the actual practical method of working with enough theory to enable the beginner to understand why things are done as they are." We are confident that those of our readers who are interested in photo-engraving will be glad to add this little book to their photographic libraries. Copies may be obtained from PHOTO-ERA MAGAZINE, Wolfeboro, New Hampshire, at \$1.50, postpaid.

Photographs of Polish Weddings

ANOTHER item in the expenses of a wedding is the cost of photographs. It is the custom in most foreign-born groups to have large photographs, not only of the bride and groom, but of the entire wedding-party.

The Polish people also have another picture of the bridesmaid made with the best man.

These photographs cost as much as thirty dollars a dozen, and at a higher rate if less than a dozen are ordered. The number ordered depends on the economic condition of the family, but the minimum is six of each. The pictures of the bridal party are the largest and most expensive, and are usually given only to the immediate family and the attendants. The smaller pictures of the bride and groom are given to all the friends and relatives, especially to those in the old country.

This is an important means of keeping up the connection with those at home. An enlarged and colored copy framed in an ornate gilt frame is usually ordered for the newly married couple, and is an added expense.

Photography from a Train

ALTHOUGH it may be a difficult matter to obtain pictures of artistic merit from the window of a railway-train in motion, it is comparatively easy to procure record- and souvenir-photographs of great interest in that way. When traveling through a foreign country, the ability to photograph from a moving train is invaluable, as scenes can be recorded in this manner which would otherwise have to be left altogether. The most suitable instrument is of the direct-vision focal-plane type; but excellent snapshots can be made with any camera that is fitted with a direct-vision view-finder.

In this, as in most branches of photography, the question of exposure is the chief stumbling-block. Rules have been invented by which to calculate accurately the shutter-speed necessary to obtain unblurred pictures when photographing from a moving base. In practice, however, these rules are of little use. When one is photographing from the window of an express train moving at thirty or forty miles an hour there is no time for even rapid mathematical calculations; indeed, the photographer would be well advised to concentrate his whole attention on getting the entire image on to the plate, without indulging in any form of mental gymnastics. It is clear, therefore, that the shutter-speed must be decided upon beforehand. It may safely be stated that any exposure slower than 1/50 second is out of question; it is generally necessary to give from 1/100 to 1/350 second if results are desired.

It is unwise to attempt to photograph any object nearer than fifty yards. Distant mountains and wide open sweeps of landscape make the best subjects; but it is often possible to obtain a photograph of some village nestling in a distant hollow, or a snapshot of a little harbor-town close by the sea. The lens may be used at its widest aperture, as most subjects will be well beyond the infinity-point. If the foreground is a little out of focus, it can generally be trimmed off the print without upsetting its composition. When making a photograph from a train, the camera should be held pressed firmly against the face; but the arms must not rest on any portion of the coach. It is also inadvisable to allow the camera to project beyond the window-frame, as the wind caused by the rapid movement of the train invariably sets up vibration. A point to bear in mind is that there is generally less vibration in the middle of a train than at either end, and this same rule will also be found to apply to each individual coach.

N. D. PANTER, in *The Amateur Photographer*.



RECENT PHOTO-PATENTS

Reported by NORMAN T. WHITAKER



THE following patents are reported exclusively for PHOTO-ERA MAGAZINE from the law-offices of Norman T. Whitaker, Whitaker Building, Washington, D.C., from whom copies of any one of the patents can be obtained by sending twenty-five cents in stamps. The patents mentioned below were issued from the United States Patent-Office during the month of July, the last issues of which have been disclosed to the public.

Patent, Number 1,378,101, on Photographic-Printing, has been granted to William F. Folmer, Rochester, N.Y., assignor to Eastman Kodak Company, Rochester, N.Y.

Camera. Patent, Number 1,378,208. William E. Bailey, Rock Island, Ill.

Julius Joe Schuermann, of Clinton, Iowa, has been granted patent, Number 1,378,904, on Photographer's Head-Screen.

Patent, Number 1,378,936. Shutter-Mechanism for Cameras. Frederick G. Brockett, of Chicago, Ill.

Camera. Patent, Number 1,379,189. Graham King, South Orange, N.J.

Patent, Number 1,379,949. Process and Apparatus for Producing Photographic Negatives. Paul H. Wedmark, Minneapolis, Minn.

Charles E. Hutchings, of Rochester, N.Y., has been granted patent, Number 1,380,209, on Photographic-Plate Holder, assigned to Eastman Kodak Company, of Rochester, N.Y.

Patent, Number 1,380,279. Treatment of Kinematographic Films. William Burton Westcott, Wellesley, Mass., assignor to Kalmus, Comstock & Westcott, Inc., Boston, Mass.

Folding Camera. Patent, Number 1,380,810. Robert Kroedel of Rochester, N.Y., assignor to the Eastman Kodak Company, Rochester, N.Y.

Sven Paulson and Abram Hatch of Heber, Utah, have been granted patent, Number 1,381,222, for Developing-Machine.

Patent, Number 1,381,548. Film-Developer. Otto F. Halmer, Los Angeles, Calif.

Camera. Patent, Number 1,381,722. Hart H. McDaughton, of Maryville, Tenn.

William Cecil Jeapes, of London, England, patent, Number 1,381,840. Kinematograph-Film-Feeding Apparatus.

Atmosphere and the British Coal Strike

ONE of our British cotemporaries calls attention to the unusual atmospheric condition that was brought on by the coal strike in England. Photographically, the strike made itself felt at once.

It may be a matter for rejoicing that the atmosphere of London has become remarkably clear—clearer, probably, than at any time since it became a huge city, since the coal strike reduced to a minimum the number of fires, and we have been reading in the lay-press a number of comments to that effect. But whatever may be the influence of coal-smoke upon the physique of the inhabitants of the Metropolis—and London with all its grime stands high among healthy cities—the disappearance of its

characteristic haze has deprived it of one of its charms. The atmospheric effects peculiar to the capital have been the wonder and delight of every artist from beyond the seas. Present conditions permit of clear-cut views extending for many miles; excellent no doubt for record- and survey- purposes, but in many cases hopeless for picture-making; so that the Londoner who is a pictorial photographer finding his subjects amid its streets and parks does not hail with joy the sudden removal of the effects which made many of its vistas so particularly beautiful. This result of the strike is doubtless not limited to London, and there must be a similar clearness of atmosphere in some of our other big cities which are similarly affected. Perhaps the most timely advice that can be given is to make the best of things, and to take advantage of the opportunity to do all the photography possible of subjects for which an altogether abnormal transparency of the air is favorable.

Louis Fleckenstein

In a recent issue of *The Amateur Photographer* appeared the picture of Louis Fleckenstein and the following editorial reference in the photographic "Who's Who" department. We hope that more of our workers will be so honored. Men like Mr. Fleckenstein are making great efforts to dignify the art and service of photography. It is but just that they should receive the recognition that is due them.

"Among the pictorial photographers from overseas whose work has become well-known in this country, Mr. Louis Fleckenstein, of Los Angeles, is an outstanding example. Many of his pictures have been reproduced in our pages and in *Photograms of the Year*. He is an example of the successful professional photographer who has been able to make his own ideas and methods dominate the output of his studio, and has been able to create a demand for broadly treated work among his *clients*, as well as to achieve a position for himself in international exhibitions. He took up photography in 1896, while studying in Montana with an artist who despised not snapshot-photography, or the use of a small Kodak for note-taking for his pictures. Thus started, Mr. Fleckenstein, acquiring a camera of his own, made rapid progress, and quickly came to the front in competitions and exhibitions. He was one of the organizers of the Salon Club of America, and settled in Los Angeles in California, starting as a professional photographer in 1907. He has been the director of the Camera Pictorialists of Los Angeles since 1912, and was recently elected a member of the London Salon of Photography. He has worked in many processes; and the pictures by him with which visitors to recent exhibitions are familiar are remarkable for their breadth of treatment, and for a richness and depth which suggest multi-gum. He has strong ideas on the relationship of professional photography to pictorial work, which he puts into practice."



A New Three-Color Camera

* ACCORDING to L. P. Clerc writing in *The British Journal*, a new camera to make three-color sensation negatives in rapid succession with one lens has just been constructed by M. H. Liabeuf, who has had a long experience in the making of Kinematograph cameras, and during the war as a member of the Aerial Photographic Service invented an ingenious inclinometer for aerial cameras.

The three plates of 13 by 18 cm. size occupy the three faces of a prism of equilateral triangular section, the three screens being mounted on a disc, by which each is brought in turn in front of the lens. The special features of the camera are, first, the Maltese-cross mechanism, by which the plates and the screens are rapidly moved. In a portrait-studio, under ordinary daylight (April), the three negatives have been made in two seconds on commercial panchromatic plates. The other feature is the daylight-loading of the camera; the exposed plates can be removed and replaced by fresh without recourse to a darkroom.

German Photo-Goods in England

EXACTLY what we have described in connection with the optical industry will take place in the photographic industry, unless one of two things happens. Either the Board of Trade must, under the Safeguarding of Industries Bill, include cameras as scientific instruments and afford the protection given to such articles, or the British photographic dealers must support the British photographic manufacturers to the exclusion of the German manufacturers. From our inspection of a number of dealers' windows in prominent centers we have noted with considerable satisfaction the removal of German apparatus within the last few weeks. We have heard that in some cases dealers have quite a good stock of such apparatus within, and we know of one or two cases where German cameras have been openly advertised in the Press. The level-headed dealer will not become panic-stricken on this account, but will know perfectly well that his future depends upon the prosperity of British industry, and he will, therefore, see to it that the British manufacturer has his fullest support.—*The Photographic Dealer*.

As stated before, some time ago, we sympathise with the English photographic manufacturers and dealers, and are still convinced that the only possible way to compete successfully with the German photo-products that are sold in England, is by means of a protective tariff. Although Britain's commercial supremacy was due largely to its policy of free trade, the time appears to have come for the application of a protective tariff. Even this expedient may not suffice to deal successfully with the power, ingenuity and resourcefulness of the German manufacturing industry. However, it appears that a tariff will now be imposed upon certain German manufactured products entering Great Britain. What the outcome will be, remains to be seen. Might it not be well for the patriotic *Photographic Dealer* to encourage the

adoption of a protective tariff, rather than to appeal to the photographic dealers and consumers to abstain from buying photographic cameras, lenses and chemicals of German manufacture, whose excellence has long been established?

The world is now facing new and important issues that must be met with courage and intelligence. Certain past conditions will not return; that is certain. Patriotism or sentiment is one thing; business is another. Every country will be obliged to face hard, stern facts, and to this end each nation must put forth the best of its ability and resources. That which is prohibited, often has an irresistible fascination; and the more our esteemed cotemporary opposes the home-consumption of former-enemy products, the sooner it is likely to defeat its own end. Discretion is the better part of valor in some cases. We sympathise deeply with the feelings of *The Photographic Dealer*, but believe that it will be unable to stem the tide of the consumers' preference. It should be courageous, philosophical, optimistic.—EDITOR.

Opal Pictures

It has been said that there is nothing new under the sun except that which has been forgotten, and portraits upon opal glass have been out of fashion for so long that it is possible that the present generation would regard them as a novelty. *The British Journal* reminds us that a quarter of a century ago many photographers did a fair amount of business in carbon-prints upon opal, finished either in monochrome or color and mounted in ornolu-frames. These were usually supplied in addition to the original order, and formed a very remunerative side line. There was also a good sale for bromide-opal enlargements in sizes from 12 x 10 to 18 x 16, the latter size fetching any price up to ten guineas. We do not know if any maker now lists bromide-opal plates; but they could doubtless be obtained to order. Sepia-toning was not practiced when opal bromides were the vogue, so that all sepia-enlargements had then to be made in carbon; but now large sepias are as easily produced as black and white. In the smaller sizes carbon is greatly superior, and the range of colors, especially in the reds and warm sepias, is particularly attractive.



After the Real Thing

A WELL-KNOWN motion-picture director had taken his company to the beach to get a bathing-scene. He said to one of his actors, "Now in this scene go over there and kiss those bathing girls. Then their escort will punch you and you run."

"But those you pointed to aren't our bathing girls," protested the player. "They're a private party."

"I know it," said the director. "Consequently you'll kiss them much more realistically, and their escort will punch you much more realistically and we'll get a more realistic scene."—Claimed by a Boston paper.



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Verito picture by Wm. F. Nugent. The original shows a delightful quality,—an atmospheric effect which it is difficult to retain in the half-tone reproduction.

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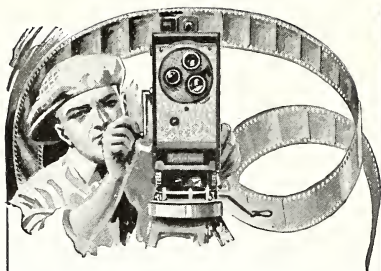
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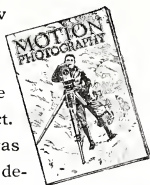


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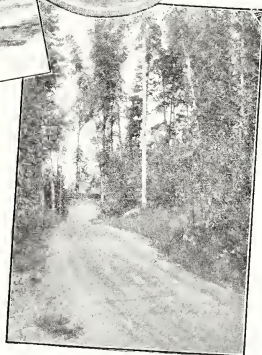
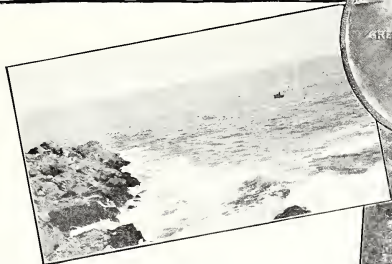
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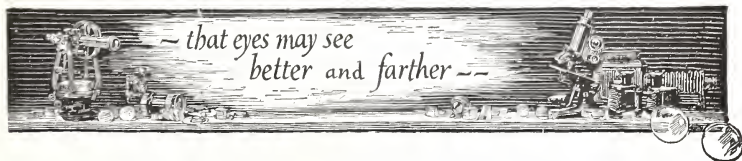
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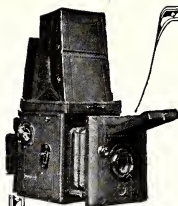
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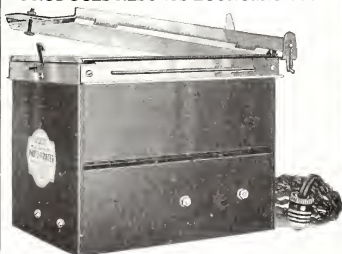
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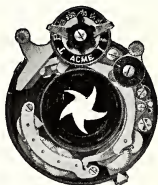
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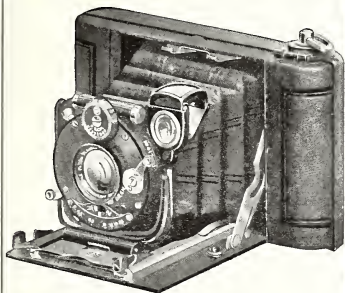
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SEPTEMBER, 1921

No. 3

A Pilgrimage to Wolfeboro, New Hampshire

Part Two

HERBERT B. TURNER and RALPH OSBORNE

THE town of Tuftonboro, which adjoins Wolfeboro to the north, derives its name from Colonel John Tufton Mason, an English officer of marines in the English navy, who was in command of the land-forces which captured Senegal from the French. He was tenant in tail of Captain John Mason of Portsmouth, England, patentee and founder of New Hampshire in America. As such tenant in tail, he docked the entail and sold all unoccupied lands in the grant to a body of Portsmouth gentlemen, known as the Masonian Proprietors. It is said that they were so well pleased with the transaction, that they reconveyed the town of Tuftonboro to him, the consideration being a bowl of punch.

On the very edge of this township lies Mirror Lake, across which is a fine view of the mountains of the Ossipee Range. Here we made a picture; but the dullness of the sky and the flatness of the light prevented us from doing what we knew was photographically possible in this enchanting spot.

The main object of this morning's ride was to visit a club in the process of construction, locally called "The Millionaire's Club" situated on the heights above Melvin Village. A vast shelving-piece of ground has been cleared and a beautiful main club-building erected which has a gorgeous view of the lake with its many islands and mountains beyond. Grouped about the main building are ten or a dozen attractive, white, two-storied bungalows, awaiting occupancy by the club-members and their families. There are tennis courts, and even a golf-course is in this elevated play-ground of the ultra prosperous. It is said that one must pay \$5,000 to join and \$1,200 a season for the privilege to live there. We were allowed to drive about the grounds;

but to photograph the place, or from it, was forbidden.

The sun, had we been able to see it, was getting on towards the meridian and we were obliged to turn towards home. On the way, as we stopped to make a "long shot" of the lake through an attractive vista, we came upon a surveying-party who told us they were surveying for a new state-road which is to encircle the lake. This was mighty good news to us; but we wished that it had been completed before we arrived in this country, for really the present roads are wretched.

The afternoon brought with it rain in such quantities as to prevent us from venturing out of the house. The ubiquitous movies, however, offered an excellent evening's entertainment. The feature film was Tournier's production of "The Last of the Mohicans." This is really a remarkable film, and the stage-directing and photography are far above the average. It is such films as this that can well give inspiration to the pictorial photographer and show him the great possibilities encompassed by the camera.

The second morning of our visit dawned clear and cool. Mr. Beardsley proposed that we spend most of the day on the lake; so directly after breakfast the four of us set off for the little inner harbor in the very center of Wolfeboro, which is some five minutes' stroll from the house. There was Captain Beardsley, the father of our host, who has served years in the United States Navy, and was engaged in hydrographic work in West Indian waters and who has been a great traveler—passing around the globe more times than he has fingers. There was Mr. Beardsley, our publisher, dressed to run the good ship, "Photoera"—a motor-boat with a powerful engine. The Captain, of course, was to command the helm and issue orders as is fitting in



OSSIPEE RANGE FROM MIRROR LAKE

TURNER AND OSBORNE

such a case, while the proprietor of the magazine was to act as engineer, stoker, oiling-devil and all that. He was a disreputable looking person, clad in oil-stained khaki, and we expected the small children by the roadside to flee in terror at his approach. There was Osborne, formerly of the Grand Opera, who has sung by special command to crowned heads at royal palaces. Well, Osborne looked all right, a jaunty, well-set-up fellow; and there was Turner, short and thick-set, who loves to wander over this beautiful earth of ours. Turner and Osborne were laden with cameras, of course, and full of arguments about the art of photography at large—always are, you know.

Reaching the boat, we were quickly off, passing under a low bridge, and soon found ourselves on Lake Winnepesaukee.

Statistics are a bore some thing; nevertheless, we acquired a few. Lake Winnepesaukee is the largest lake in the State of New Hampshire, being twenty one miles long and twelve wide. It contains an area of seventy one square miles of water and is dotted with two hundred and seventy four islands, some of which are quite large. The distance around the lake is one hundred and eighty two miles. Over two hundred thousand people visit it yearly. Mr. Beardsley says that the map of the lake makes him think of an octopus. He is not far wrong,

for it has many arms that feel out into the district it occupies.

While Mr. Beardsley and his father were running the craft, and constantly consulting their watches to see if they made the different buoys on the proper second, we the camerists drank in greedily the beautiful scenery.

The district about us was of a green not seen about a city—we should have said a symphony of green; for along the shore rich, dark fir-trees were in contrast to patches of birch, maple and elm, the white bark of the birch standing out effectively. We passed point after point, often decorated with weirdly shaped fir-trees, Japanese in effect. Pleasing and inviting bays stretched away to districts of highlands that were robed for summer in charming masses of vegetation. All about us rose an amphitheater of hills and, beyond them, mountains. Away to the northward rose the White Mountains with Mt. Washington as their highest point. At the right, and nearer, the pyramidal Mt. Kearsarge lifted its head, and, towards the left, Mt. Chocorua, followed by Passaconaway, Sandwich Dome, Tripyramid and Osceola. The shore, for miles, was lined with summer-residences, some built of wood and others of cement. Fortunate are the owners of these estates in the selection of location, for as Edward Everett has written, "My eye has yet to rest on a lovelier scene."



VISTA IN TUFTONBORO
ACROSS LAKE WENTWORTH
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The roofs of these summer-retreats, red or green in tone, broke the shore-line with notes of accent. Often we came upon an expanse of carpet-like lawn that enticed the eye. The water was all but rippleless, and we could look far down through its crystal-like clearness, sometimes to the very lake-bottom. We sped past islands, some deserted by man, but usually containing a cluster of summer-homes. One island was covered with trees in such a manner that it suggested an atoll, and we called it our South Sea Island. A gem it was, as it rose out of the lake silhouetted against the light, reflecting itself in the placid water.

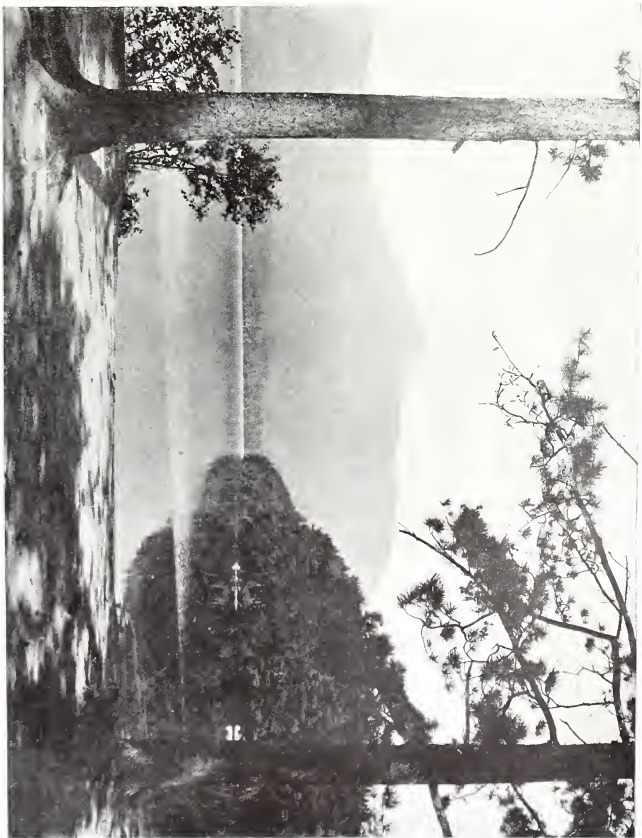
We thus sailed along mile after mile until, at length, a beautiful bay opened up before us, known as Winter Harbor, into which we glided, and continued, past green banks, until we saw at its farther reaches a stately building of classic design, creamy cement in composition with a roof of red tile, set off against a forest of green. It is known as the Libby Museum, a herbarium of New Hampshire's plant-life, the loving gift of Dr. Libby, of Lynn, to this beautiful region. We stopped the boat to make a record of it; but such a record under a noonday-sun can give no idea of its charm in such a setting. Retracing our route, on reaching the main lake again, we

landed on a particularly attractive point of land, sprinkled with cottages, where we looked for pictures of the lake and mountains beyond, while the song-birds in the trees above made music for us.

Again we started and landed at another point which contained one of the many camp-establishments for boys or girls that are so numerous and popular in this region. Here our cameras were again used. Once more embarking, we steered homeward and on arriving set to with a will to the excellent dinner that was awaiting us; for after a morning in the clear, fresh, wine-like air we acquired tremendous appetites.

The next time, we steered in another direction, landed occasionally on islands or mainland, making pictures here and there, always knowing that it was quite beyond our power to depict for others the beauty of it all. Thus the day passed—a perfect day of sunshine and happiness amid scenery that caused the soul to expand, a day that will always stand out distinctively in our memories.

The next day we were again blessed with fair weather, much milder than the day before. As Mr. Beardsley was held at his office with magazine-matters, we decided to take the automobile



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and follow the road along the lake southward as far as Alton Bay, then swing inland to Alton, thence home—a run of some twenty-five miles. An early start was made with Captain Beardsley as pilot. Down the kindly, elm-shaded Main Street of Wolfeboro we rolled, past homey, comfortable, white houses set in their green “yards” until we passed out of the town into a green, rolling country, to come soon to South Wolfeboro, a pretty little hamlet where we turned off towards the lake-shore. Between South Wolfeboro and Alton Bay there are eleven

in contour, enchanting in its abundance of foliage. We stopped to make a picture of one of those old-fashioned drinking-fords for beasts, so typical through these states, but now rarely used, where one drives down a side way from the road into a brook, that the horse may slake its thirst, and through the brook up again to the road. A collection of old farm-buildings next received our attention, with a rather interesting family burial-ground close by, that suggested in its peculiar construction some of those prehistoric remains one comes upon in Brittany



FAMILY BURYING-GROUND

TURNER AND OSBORNE

hills, that seemed mountain-sides to us, so steep and long they were, and from the top of many of them we beheld superb panoramas of the lake, its islands and the mountains beyond.

Onward we went, passing now and then a farm-house with occasionally one of the forlorn, plaintive private grave-yards with time-worn head-stones commemorative of some loved one who had passed into the Great Mystery. At length, we coasted down into Alton Bay, a small collection of very modest houses, and a pier stretching into an arm of the lake, to which was moored a large lake-steamer.

At Alton Bay, we came upon a state highway which soon brought us to Alton, a fair-sized town, by no means so large as Wolfeboro, or so attractive, but still with a charm of its own. Turning north, we followed the inland-road back towards home. A steep hill greeted us almost at once, only to be succeeded by a series of them. The country on each side was very beautiful—pure, undiluted New England country, graceful

and elsewhere, that cause the traveler to marvel as to who built them, and just why.

A mile or more beyond, Osborne saw a primitive farm-house set pleasingly on a knoll, with some woodlands back of it. It seemed to offer possibilities, so leaving the Captain placidly content over a cigar, we alighted to see what could be done from a pictorial standpoint with the scene. We inspected it from different angles but the lighting was too poor to make a picture. We were about to join the Captain and continue our journey when the owner of the house appeared and asked if we “chaps took pictures.” We humbly confessed. He then stated we were just the “chaps” he was looking for, as his bees were swarming. We brightened up and told him to lead the way. Up the short hill we strode, opening up our cameras as we went. He led us to the back of the house and there, sure enough, was the swarm, hanging to the end of a hive, like an elongated pumpkin made of bees. We, nothing daunted, moved on nearer but



THE WILLOW-FARM

TURNER AND OSBORNE

noticed that our host hung back. He remarked, *sotto voce*, that "they were a little cross." We stopped; so did he. Bees were darting about us from every direction. We asked meekly if he thought they would attack us. He said they had stung his "Missus" pretty badly. We looked at him long and anxiously, we looked at the swarm and the flying, buzzing scouts, we looked at the house and saw an old lady peering out of the window with her head swathed in bandages, we looked again at the swarm, we looked at each other searchingly and then—we cautiously tiptoed away.

Later, we came upon a delightful scene—a bit of road falling into a valley, some picturesque trees, a fine, old farm-house, with a distant view of mountains and lake. We stopped, and once more got out to investigate. As we were focusing up the scene upon the groundglass, a farm-team towing a harrow came along and, as it reached a favorable position, we captured the picture. The team turned into the driveway of the house and came to a stop at the back-door, and presently the kindly farmer came down to meet us saying, as he joined us, "My wife says she wants you to get all there is 'round here and she wants you to come up and take the view from our chamber-

window which is the best view." Would a city-dweller have been so thoughtful? We leave it to the reader. We thanked him, saying that it was his house and its setting that pleased us; that we had made several pictures of the lake, and that vast views such as his house commanded were quite difficult to make and have them convey any adequate idea of the grandeur of such a scene. Soon afterward, we reached South Wolfboro and, in a few minutes more, we were seated about the genial dinner-table.

The afternoon was spent in investigating Lake Wentworth—which lies not far to the east of Wolfboro—a large, blue lake flecked with islands surrounded by distant mountains, where there is another summer-colony, but less pretentious, perhaps, than those to be found on the borders of Lake Winnepesaukee, yet attractive and well shaded by woods. The lake is named for Governor John Wentworth, the last of New Hampshire's Royal Governors, who built here a summer-home, the first of its kind, it is said, in the State.

At nine thirty the next morning, we said good-by to our very kind hosts, and started out on our return-trip, choosing the inland-route by the way of Alton, Barnstead, Chichester, Sum-



CANAL IN LOWELL, MASS.
TURNER AND OSBORNE

cook, Manchester, Nashua and, thence, by Lowell to Boston. The roads were from poor to fair, as far as Suncook, the scenery at times pleasing, but not noteworthy, and need not detain us here. At Suncook, we came upon the interstate highway, which is all that a motor-road should be. Luncheoning at the city of Manchester, fifty two miles from Wolfeboro, we sped on to Nashua, a homelike little city, south of which we came to a delightful old house by the wayside, that caused us to stop and ask questions. It is known as the "Willow-House." The story goes that about 1720 a man returning on foot from Boston to Nashua, some forty miles, where he had been to attend the General Court, stopped here for refreshments and, sitting upon the stone doorstep, entertained the children of the household with an account of his experiences in the city. As a cane, he carried a newly-cut willow-stick, and, on leaving, he thrust it into the ground close to the house, saying, "If let be, it will be a tree in time." Well; to-day it is a very large and venerable tree, hence the name of the homestead which now belongs to an old man who is a direct descendant of the builder.

At Lowell, the industrial city, just inside the State of Massachusetts, Osborne made a picture of a tree-shaded canal that feeds one of the great mills. It was a pretty bit almost in the heart of the city.

Boston was reached soon after three o'clock. Thus ended a highly enjoyable trip. The route up registered one hundred and thirty miles, whereas the one back was one hundred and eight.

We agreed, for reasons of our own, that we

would not use a soft-focus lens or a light-filter; but when we came to unpack our things at Wolfeboro, lo and behold, each of us had a "Smith" in our kit and a set of filters. However, we did not employ the lenses, but stuck to anastigmats. We wish now that we had.

We used film-packs on the reflecting-cameras and roll-films on the others, and systematically, with profound care, *underexposed the film-packs*. We trudged up to the Boston office of the PHOTO-ERA MAGAZINE, a few days later, and grudgingly showed that very exacting gentleman, Dr. Wilfred A. French, some of the most contrasty, soft-lens enlargements of the lakes that this good man had set his eyes upon in years. We meekly listened to a few remarks from him on amateur-photographers at large, and ourselves in particular. We returned to the Union Camera Club by the way of back-alleys.

Beardsley, poor fellow, was more or less party to our crime, so he could not say much in his letters; but we can well imagine what he *thinks*. When pictures of Lake Winnepesaukee are mentioned at the Club, Osborne and Turner retire to darkrooms and lock the doors. The hardest cross to bear is the look of pitying condescension from Raymond E. Hanson, who was to have been one of the party, but was detained by business. He has not said a word about soft lenses used slightly stopped down, three-time color-filters, double-coated orthochromatic plates, waiting for clouds and proper lighting and the employment of diluted developer at a factor of twelve. He knows better than to say anything of the sort.



TRANQUIL WATERS — LAKE WINNEPESAUKEE

TURNER AND OSBORNE

Simple Facts in Regard to Actinism of Light

GEORGE E. BLACKHAM, M.D., F.A.A.S.S.



IN the PHOTO-ERA MAGAZINE for November, 1920, appeared an article entitled "A Simple Experiment in Night-Photography," in which the author arrives at the conclusion "that a 'dipped' electric lamp—of whatever color—has less actinic value than one that is clear glass" and draws the corollary that "Hence, in night-photography the colors of objects are apparently of less importance than by daylight."

Now this remarkable discovery, that "the whole is greater than a part" which is axiomatically true, and the still more remarkable corollary "Hence, in night-photography the colors of objects are apparently of less importance than by daylight," which is not in the least degree true, seems to arise from a total misconception of the nature of light and of the chemical, actinic, action of the different parts of the spectrum.

The author's argument seems to run somewhat like this: "The blue rays have the most actinic power and therefore if I dip an electric bulb into a solution which will make that bulb look blue it should be more actinic than a white bulb of the same candle-power." He seems to think that in dipping the bulb into the blue solution he has *added* the blue to the light from the bulb whereas he has only *subtracted* the other rays which are stopped by the blue coating.

There are no more blue rays in the light from the blue-coated bulb than there are in the light from the white bulb, only less red, yellow, green, &c.

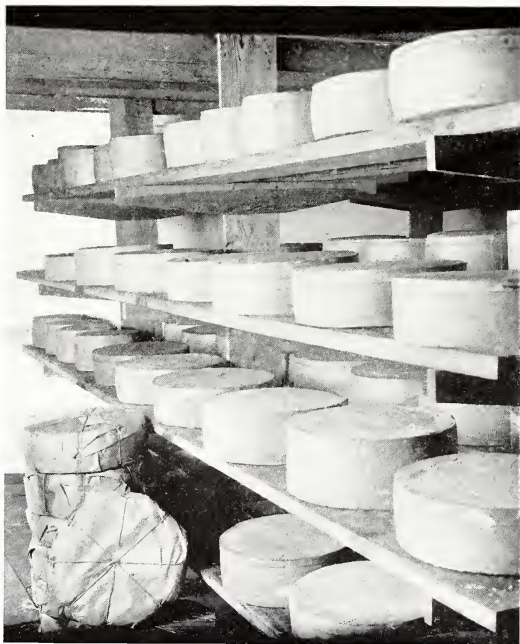
It seems a pity that it has become customary to speak of the blue, violet and ultra-violet as "the actinic rays." It is true that they are most actinic for the silver-compounds in an ordinary photographic dry-plate; but *all* rays are actinic, even the red, as can be proved by exposing say one-half of an ordinary plate to the light of the red lamp in the darkroom for a considerable period and then developing carefully, when a marked difference will be seen in the exposed and the unexposed halves of the plate, which shows that the red rays have some actinic force even on an ordinary plate; of course, by substituting an orthochromatic—or still better a panchromatic plate—for the ordinary plate in this experiment the result will be much more marked. The results with the Autochrome plates of Lumière or Paget are further confirmations of the fact that all the rays of the visible spectrum have actinic value for sensitive photographic emulsions.

In view of these facts, it is clear that the white light from an untinted electric bulb, containing as it does all the blue rays same as those in the light from the blue tinted bulb plus the other rays that go to make up white light, must be more actinic than the light from the tinted bulb which passes the blue rays only.

Light, according to the generally accepted wave-theory of Huyghens, consists of extremely minute and rapid vibrations of the luminous ether which with all space is assumed to be pervaded, the vibrations corresponding to the blue being, approximately, one half the length and twice the rapidity of the red. The combination of the various wave-lengths that go to make up the visible spectrum produces to the human eye the sensation of white light.

If white light falls upon the surface of any object some of these rays are absorbed and others reflected. Those reflected in the greatest proportion give the object the color which it appears to our eyes.

Certain vibrations being absorbed and others reflected, the force of the absorbed rays is not extinguished but, by the law of the Conservation of Force, must be transformed into some other form of energy as heat or chemical action. The chemical action resulting from the absorbed energy is called actinism and it is evident must be in proportion to the quantity absorbed. The ordinary dry-plate absorbs the blue, violet and ultra-violet rays in much larger quantity than it does the red, orange and yellow, which are largely reflected. Therefore, to the ordinary photographic plate, the blue, violet and ultra violet are the most actinic; or, in other words, exert the strongest chemical action on the plate. Orthochromatic, and still more so panchromatic plates are so sensitised by certain dyes that they absorb more of the longer vibrations toward the red end of the spectrum and therefore to a *panchromatic plate* all the rays of the visible spectrum are actinic though, even in a panchromatic plate, the short vibrations, toward the blue end of the spectrum are more completely absorbed and therefore more actinic than the red and yellow. For this reason, it is necessary, in order to get the best effect of a panchromatic plate, to use a deep yellow or orange-filter which stops part of the blue rays and allows the red and yellow to pass almost unhindered, thus evening up the actinic force of the various rays by reducing the quantity of the most active ones. We have



CHEESE PHOTOGRAPHED BY ITS OWN LIGHT

A. J. DADISMAN

seen that for photographic emulsions the blue and violet rays are the most actinic and why.

In the human eye it is different. Here the visual purple reflects the blue and, in a lesser degree the red, and absorbs the medium wave lengths, viz.: the yellow, which in consequence seem brighter to the eye than either the blue or red.

As in a lens not corrected for achromatism the blue rays are brought to a focus sooner than the yellow or red and such lenses are said to have a chemical focus different from their visual focus and those who use such lenses are obliged, if they wish to get a fairly sharp picture, to move the plate a little closer to the lens than it was when the visual focus was the sharpest.

To sum up we may lay down the following facts:

- 1st. The whole is greater than any of its parts.
- 2nd. White light is composed of a combination of colored rays running from the longer vibrations of the red through orange, yellow, blue of gradually diminishing wave-lengths to the shortest visible ones of the violet.
- 3rd. When white light falls upon any surface some of these rays are reflected and some absorbed, the reflected rays determining the color which the object appears.
- 4th. If the substance upon which these rays fall is in a state of unstable chemical equilibrium the rays which are absorbed effect certain chemical changes and they do so in proportion to the degree in which they are absorbed. This power to effect chemical change is called actinism.
- 5th. As all the rays are absorbed to a certain extent, all are actinic rays. Those which are

most fully absorbed have the most effect or are most actinic. For the ordinary dry-plate the blue and violet rays are most absorbed and therefore most actinic. For the human eye the yellow rays are most absorbed and therefore most actinic.

By passing light through a colored film such as a color-screen or a dipped electric globe, we make the light appear colored but we have added no color only stopped some rays and let others through. Hence we should know *a priori*

that "by dipping a lamp in blue solution we merely cut down the actinic power of the light." The author of the article, "A Simple Experiment in Night-Photography," is correct that far; but he is not correct in his deduction: "Hence, in night-photography the colors of objects are apparently of less importance than by daylight." They are just as important, provided the light which falls upon them is *white* light containing all the colors of the spectrum in their due proportions.

Adapting a Verito to a Graflex

HERBERT B. FISHER



ABOUT the time that the Wollensak people put on the market a new design of Verito with a compact mount, I consulted their catalog to see the size necessary for my R.B. Telescopic Graflex $3\frac{1}{4} \times 4\frac{1}{4}$ and found that they

I found that the front-door of flap of the camera would not close, and removed it to construct a new one. This was made according to the dimensions shown on the drawing of one piece of heavy tin-plate. After the metal had been cut to the shape shown, it was bent and soldered

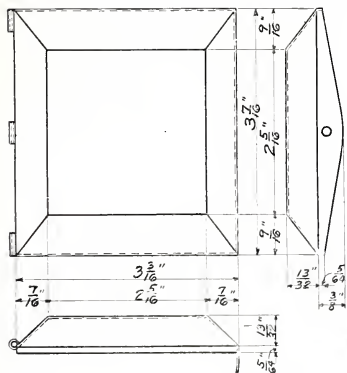


Fig. 1.

recommended a $6\frac{1}{2}$ -inch F 6 Verito. On applying that to my camera and trying it on portraiture, I felt that the speed was a little slow for home-portraiture and changed it for a seven-inch F/4 Verito. On placing this in my camera,

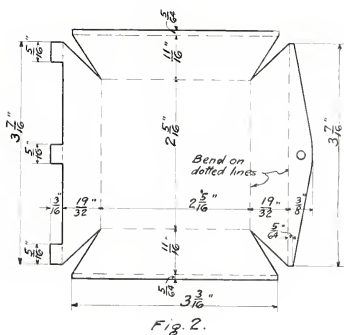


Fig. 2.

at the corners and the two small projections on one edge were bent to form a hinge. The inside was painted black with Kodalac and the outside was covered with the remains of an old wallet. The outside of the metal must be sand-papered carefully to remove all grease and also to provide a tooth for the binding. The glue which I found best was Grippit. Ordinary glue does not hold so well. The photographs of the camera show about the amount of extension of

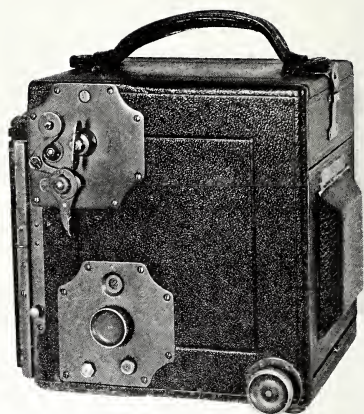


FIGURE 2

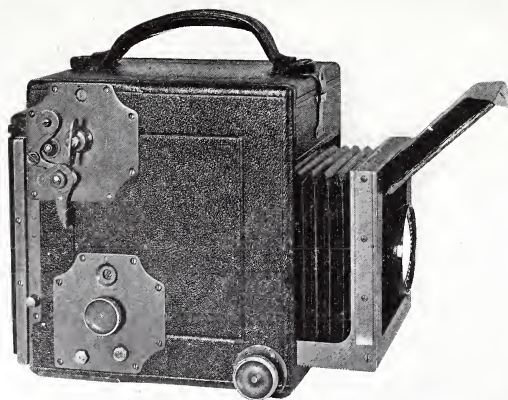


FIGURE 3



MISS H.

HERBERT B. FISHER

the lens beyond the front of the camera. The portrait of Miss H. was made by the light of an ordinary kitchen-window, in November, about 2 P.M. at F/4, about 5 seconds' exposure, with bright sun shining outside.

[The Wollensak Optical Company make Verito Lenses to fit all types and sizes of Graflex Cameras. Some of the smaller Graflexes are, however, of such a compact nature that they require special Verito Lenses of F/6 speed. These small and compact F/6 Veritos are oftentimes recommended merely because of the fact that the front-board will not close with the larger F/4 lenses in place. Mr. Fisher has suggested one method of overcoming this difficulty. However, in some cases when the Graflex camera is equipped with a metal front-board and has sufficient bellows-extension to accommodate the longer focus of the F/4 Veritos, the camera can be adapted by either counter-sinking the flange in the back of the front-board which

will make the lens set back the thickness of the board. In the following table, Veritos A and B are F/6 lenses of 5-inch and 6 $\frac{1}{2}$ -inch focus respectively; and No. 2, No. 3 and No. 4 are F/4 Veritos of 7 $\frac{1}{4}$ -inch, 8 $\frac{3}{4}$ -inch and 11 $\frac{1}{2}$ -inch foci.

<i>Graflex</i>	<i>Verito No.</i>
1A Autographic.....	A
3A Autographic.....	2 or B
Auto 3 $\frac{1}{4}$ x 4 $\frac{1}{4}$	A
Auto 4 x 5.....	B
Auto 5 x 7.....	3
Auto Junior.....	A
R. B. Junior.....	B
Compact 3 $\frac{1}{4}$ x 5 $\frac{1}{2}$	2 or B
Compact 5 x 7.....	3
Telescopic R. B. 3 $\frac{1}{4}$ x 4 $\frac{1}{4}$	B
Telescopic R. B. 4 x 5.....	2
R. B. Auto 3 $\frac{1}{4}$ x 4 $\frac{1}{4}$	2
R. B. Auto 4 x 5.....	3
Press.....	3
Home Portrait.....	4

[EDITOR.]



A WOODLAND POND

WILLIAM S. DAVIS

The Pin-Hole and the Pictorialist

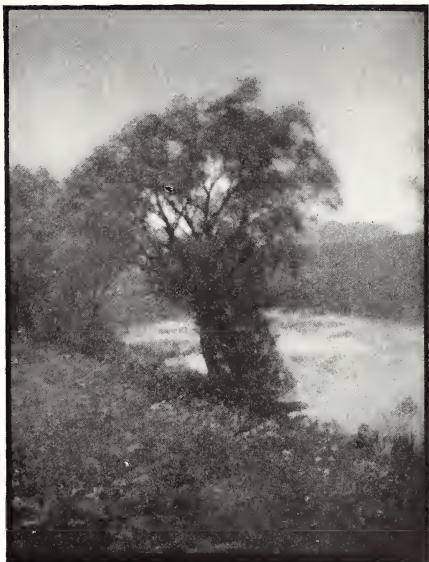
WILLIAM S. DAVIS

ALTHOUGH a pin-hole aperture can never replace a lens for all-around work, there are subjects which can be rendered most effectively from the pictorial viewpoint by the employment of such an aperture.

Whoever has seen good examples of pin-hole exposures knows that there is a charming softness of definition in the image so produced without a trace of the blurring and loss of detail which comes from deliberately throwing an ordinary lens much out of focus, whereas there is also a distinct difference in effect from that created by spherical aberration and astigmatism in a partly corrected lens. In fact, the exact effect is virtually impossible to duplicate absolutely with any lens. For this reason, alone, it is worth while to include a pin-hole attachment with any fair-sized camera-equipment, though there are other good reasons for doing so. One is the unique feature of the pin-hole aperture which possesses a truly universal focus within any limit to which it is likely to be subjected in ordinary use. This causes near and distant objects to be rendered evenly in definition (which may or

may not be advantageous from an artistic standpoint, depending upon the character of the subject, and effect wanted)—a circumstance assuredly very convenient when one wishes to get an object within a few feet, or even inches, of the camera and the distance simultaneously well defined. It is likewise a valuable feature when the swing-back must be tilted at a sharp angle in close-up architectural work, as no careful manipulation in focusing and the use of diaphragms is called for to equalise the definition, as is the case with a lens.

Owing to this quality of universal focus a pin-hole aperture will do the work of a whole battery of lenses in regulating the size of image obtained from single view-point, since it can be used close to the plate to cover a wide angle, or as far away as the bellows-capacity of the camera allows when a large image of a distant object is desired. Consequently, it is possible to select the stand-point from which a subject looks its best, and then regulate the distance between pin-hole and plate until the amount of subject-matter desired just fills the latter. This, indeed, is the feature which will doubtless most commend



WILLOWS IN THE MIST

WILLIAM S. DAVIS

such an aperture to landscape and architectural workers, and these two branches include the class of material best taken in this manner; for a scene that contains moving objects cannot be selected, owing to the comparatively long exposures required. This is due, of course, to the minute opening through which the light must pass, the time ranging from several seconds to as many minutes, which constitutes the only drawback to its more universal employment.

Having enumerated both the advantages and disadvantages connected with the pin-hole aperture, we will describe the making and use of such an accessory for the benefit of those who may wish to experiment with it themselves; for, although simple enough in construction, there are a few points which should be observed to make one which will give the best results.

As the first requirement is that the edge of the opening shall be thin, so as not to obstruct the divergence of the light-rays after passing through, a piece of thin sheet-brass is the best material to use, though other substances will

answer, even a sheet of black-paper serving for experimental purposes. The attachment can be constructed with the least trouble by cutting a circle of the metal just the right size to fit inside the lens-tube against the diaphragm-mounting, the front and back combinations of the lens being removed when the attachment is to be used. If the attachment is likely to be used quite often—especially in exchange for the lens while afield—it is more convenient to have the aperture mounted on a spare lens-board, interchangeable with that upon which the lens is mounted.

Since the quality of definition and working speed varies with the size of the opening, some like to have several apertures to choose from. When this is the case, a good-sized circle of metal can be mounted like a revolving lens-diaphragm, with a series of openings around the rim, over a half-inch hole in the board—the apertures being brought into position successively by turning the disk. If constructed in this manner, the board should be covered with a piece of black velvet or felt before placing the metal-plate in



A WOODED VISTA

WILLIAM S. DAVIS

position, to prevent any light creeping between which would dull the brilliancy of the image, if it did not cause general fogging of the negative.

Owing to the length of exposures needed, the plate can be exposed by withdrawing the plate-holder-slide, or using a corner of the focusing-cloth over the camera-front; but if an exposing-shutter, or cap, is wanted, the revolving pin-hole disk might be mounted upon the inner side of the board, and a simple wing-shutter placed outside, pivoted so that it can be turned off to one side when making an exposure.

To make the aperture in the metal: first dent the plate slightly with some blunt-ended tool on the spot where the opening is to be made; next, rub the embossed place thus produced upon a sheet of emery or fine sand-paper until thin enough to puncture easily. When this is accomplished, lay the metal upon a block of soft pine and prick the hole with an ordinary needle.

After starting the hole in this way, the metal can be held in the hand while the needle is thrust far enough through the opening to make it the same diameter as the thickest portion of the needle; thus ensuring the hole being of a definite size. The burr found around the edge of the aperture on the under side must be removed by rubbing gently with very fine emery-paper, or applying an oil-stone.

To prevent possible fog from light reflected by bright edges of the aperture, it is advisable to blacken the metal, which is done best in a chemical bath. To do this: first clean the metal well with ammonia or soda solution to remove any greasiness; then place in such a blackening solution as the following:—

Water.....	1 oz.
Copper sulphate.....	1 dram.
Strong aqua ammonia.....	3 drams.

Soak the brass in this for about twenty minutes.

then rinse in water and hold over a gas or lamp-flame until well heated.

To secure as accurate measurements as possible, the apertures should be made with needles of known numbers. Numbers from 3 to 9 can be employed; but for general purposes the opening made with a No. 8 needle is probably the most useful, though if more diffusion of definition is wanted, a No. 6 or No. 3 will give it.

Needle-sizes in fractions of an inch are approximately as follows:—

five to fifteen inches with no important change in quality of image; so ordinarily it does not seem necessary to change the size of aperture for this reason, though in the case of a larger opening, say Number 3, too much diffusion might be present when used very near the plate. There is one advantage, however, in having several apertures of different sizes available, and that is in regulating the exposure; since the time can be reduced materially at a long-bellows extension by using a larger hole than



FOREST-TONES

WILLIAM S. DAVIS

No. 3, 1/25. No. 6, 1/35. No. 8, 1/44. No. 9, 1/50.
Exposure-factors are:

1	2	3	4.
approximately.			

Within wide limits the smaller the aperture, the sharper the definition; but if the opening is too small, as compared with its distance from the plate, the definition may be injured by diffraction of light. An English authority states that the maximum degree of definition is obtained when a Number 3 N.H. is twenty to twenty-four inches from the plate; Number 6, twelve inches; Number 8, eight inches; and Number 9, six inches. However, I have used a Number 8 needle-hole at distances varying from about

might be suitable for a wide-angle effect on a small-sized plate.

As with lens-stops of a given diameter, the F/value of the aperture varies with its distance from the plate, the exposure being lengthened by the square of this distance. Take, for example, a Number 9 N.H. having an approximate diameter of 1/50 of an inch. At six inches from the plate, this has a value of F/300 (since 1/50 inch goes into six inches three-hundred times); but when the distance is increased to twelve inches, the value changes to F/600, which calls for four times the length of exposure of F/300.

Knowing the F/value of an aperture at different distances from the plate makes it possible

to compute accurately the relative exposure required; but as such small apertures are not listed in exposure-tables, or meters, it is more convenient, when these exposure-guides are used, to figure stop-sizes which will pass sixty times the light—then, after finding the exposure-reading for such a lens-stop, give *minutes* where the exposure-meter calls for seconds. For the readers' convenience, I give below a series of tables for use with any exposure-table, or meter, computed for this system.

EXPOSURE-GUIDE FOR NUMBER 3 NEEDLE-HOLE

At	$7\frac{1}{2}$	inches from the plate	find exposure required at	F/22
"	10	"	"	F/32
"	15	"	"	F/45
"	20	"	"	F/64

Give *minutes* where meter calls for seconds.

EXPOSURE-GUIDE FOR NUMBER 6 NEEDLE-HOLE

At	5	inches from the plate	find exposure required at	F/22
"	$7\frac{1}{2}$	"	"	F/32
"	10	"	"	F/45
"	15	"	"	F/64
"	20	"	"	F/90

Give *minutes* where meter calls for seconds.

EXPOSURE-GUIDE FOR NUMBER 8 NEEDLE-HOLE

At	$4\frac{1}{2}$	inches from the plate	find exposure required at	F/22
"	6	"	"	F/32
"	9	"	"	F/45
"	12	"	"	F/64
"	15	"	"	F/78

Give *minutes* where meter calls for seconds.

EXPOSURE-GUIDE FOR NUMBER 9 NEEDLE-HOLE

At	$3\frac{3}{4}$	inches from the plate	find exposure required at	F/22
"	5	"	"	F/32
"	$7\frac{1}{2}$	"	"	F/45
"	10	"	"	F/64
"	$12\frac{1}{2}$	"	"	F/78
"	15	"	"	F/90

Give *minutes* where meter calls for seconds.

If an exposure-meter reading gives a fraction of a second as the correct time with any of the stops listed, allow the same fractional part of a minute as the time with pin-hole.

While the exposures may range from a few seconds in very strong light to some minutes under unfavorable conditions, the time on the average well-lighted landscape will, as a rule, run from 30 seconds to 2 minutes for a Number 8 N.H., the difference depending upon its distance from the plate. This estimate is for rapid plates or films that have a speed of from F/90 to 111 by the Wynne Meter system.

Owing to the small amount of light passed, it is not always easy to see the image clearly enough upon the focusing-screen to study the composi-

tion properly. For this reason, it is advisable to make a simple view-finder of the direct-vision pattern, which will enable one to study the view rather than its image. To make one which will show the exact view-angle included by the pin-hole at any distance from the plate, cut a rectangular opening the same size as the plate in a square of cardboard; and a circular aperture about three-quarters of an inch in diameter in another piece. Trim the bottoms of the two pieces so when the small aperture is in use, the

view seen through the large opening will coincide with that on the focusing-screen. These pieces are used by resting the frame with the rectangular opening upon some level portion of the camera-front as nearly over the lens-board as possible, and holding the card containing the circular sighting-aperture upon the top of the camera-back above the focusing-screen while applying the eye to the opening.

My illustrations were all made with a Number 8 aperture, used at various distances, and the negatives range in size from $3\frac{1}{4} \times 4\frac{1}{4}$ to 5×7 . For purposes of reproduction these were printed by contact, though I've often made enlargements of several diameters with entirely satisfactory results.



SUNSHINE AND SHADE
WILLIAM S. DAVIS

My First Photograph

NANCY FORD CONES

Number Three

THE request from PHOTO-ERA MAGAZINE for an article on the first negative I ever made gave me a thrilling hour or two. It is twenty years and over since it was made, and I was uncertain whether or not it was in existence. We searched through many half-forgotten plates, which recalled many old memories, and brought me to the realization that I have been making photographs for a long time—

more than twenty years, I supposed that he knew all about it, so I asked him what I should have done to make it correct. I had given it an exposure of thirty seconds, and felt that it needed all the light I had, even if it did come from both sides. However, he said that he could not possibly tell me, unless he was on the spot himself. Consequently, I have never found how he would have corrected it. In fact, I have never troubled myself much about making correct negatives,



MY FIRST PHOTOGRAPH

NANCY FORD CONES

indeed, I must be one of the pioneers, for the children I then photographed are now raising families of their own, and the old people, who gave me inspiration, are living in memory only.

At last, the first negative was found. As I view it now, much the same feeling comes over me that I had at the time. It looked pretty to me, and I was proud of it; but "the wind was taken out of my sails" when the professional photographer, who developed it, said: "It is artistic, but very incorrect. You should never have light from both sides, and a shadow in the center." As he had been a photographer for

but have kept right on making things that looked attractive to me.

I was very humble and eager for knowledge, and, looking back to the time of my first exposure, I think that I would have had the surprise of my life, could I have looked into the future and known that, some day, this picture would be requested for publication. In looking now at this negative, it would require only a second to know what I should do to it, were I to go back and make it again; but I prefer that the readers of PHOTO-ERA Magazine would judge for themselves with regard to that.

Many of my pictures have appeared in these pages, and those of other journals, during the years past; but their publication has not given me the pleasure as has the request for this one—my first photograph.

[Mrs. Cones has favored us with an account of her photographic activities succeeding the making of her very first photograph, in January, 1898. For a year or two after that momentous event, Mrs. Cones had a life of adventure, photographing "everything" indoors and in the open. After her marriage to Mr. Cones, a professional photographer, she assisted him for about six years in his studio in the city, where he could not possibly keep her head from under the focusing-cloth whenever there was a good subject in front of the camera. Every good subject interested her. After Mr. Cones disposed of his photo-business in the city, in 1907, and the couple had come to live in their new home in the country, Mrs. Cones devoted about ten years to photography as an art, also for the pure joy of making little gems, like "Music," and the effort to help elevate photography as a means of artistic expression. Outside of her household-duties, there were no restrictions placed upon her and, as their place was rather secluded with somewhat wild and primitive surroundings, Mrs. Cones worked undisturbed much of the time at her favorite hobby. With her own little daughter, and very often with others, besides, she worked out ideas at her own leisure and the negatives were printed in gum and other interesting processes, but gradually, and almost without conscious effort, Mr. and Mrs. Cones drifted into a home-portrait business that takes them by appointment to the city and the surrounding suburbs. The past two years have been almost entirely devoted to this work. Mr. Cones now claims to be the assistant—as his wife's darkroom-man, her assistant-printer, her chauffeur and counselor, which keeps him constantly occupied. Mrs. Cones states she has kept no record of her prize-winning pictures, the number of which must be quite large. In the fifth annual pictorial competition, conducted by

PHOTO-ERA in 1907, Mrs. Cones was awarded the Grand Prize, a 5 x 7, Series II, Cooke Lens and which, Mrs. Cones states, has been a constant companion for years—"diamonds and all other jewels to me." Among the cameras used by Mrs. Cones was a \$10.00 second-hand kodak, with which she has made \$50 and \$100 prize pictures. Some of her friends, unable to appreciate Mrs. Cones' artistic ability, remarked that she must have a wonderfully fine lens, to which she always gave an affirmative reply. PHOTO-ERA has published only too few examples of Mrs. Cones' original and artistic pictures, and those of our readers who desire to acquaint themselves with the character of her earlier work, which she has surpassed during the past six years, are referred to the following issues of the magazine: January, 1904—"Do you want a bite?" (a little girl at breakfast with a little kitten seated beside her). This picture received honorable mention in the PHOTO-ERA Second Annual Photographic Contest of that year; February, 1908—"Calling the Ferryman" (two little Dutch-girls standing on the shore of a river, beckoning to the ferryman), awarded the First Grand Prize in the PHOTO-ERA Fifth Annual Photographic Contest of 1907; in the same issue—"Threading the Needle" and "Knitting," two masterpieces selected from the same competition, also an excellent picture of Mrs. Cones holding her baby; May, 1909—"Kitty's Breakfast" (a little Dutch girl feeding her pet kitten); February, 1911—"Hay-making," awarded second prize in the Eastman Kodak Advertising-Competition for the year 1920; November, 1912—"Music" (two little girls enraptured by music from piano), selected as one of the principal pictures exhibited at the London Salon of that year, and shown again on the opposite page; March, 1914—"Suspense," portraying two women seated at the fire-side and anxiously awaiting some important news; shown and admired at the Women's Federation of the Photographers Association of America at its convention, in 1913. Since 1914, Mrs. Cones has neglected pictorial work.—[Error.]





MUSIC
NANCY FORD CONES



Practical Observations of a Photo-Finisher

HENRY J. WIEGENER

IN comparison with many other occupations, the photographic industry—or more specifically, the business of catering to the needs of the amateur photographer—is a comparatively new vocation. Beginners in the practice of most older industries have the experiences of thousands of craftsmen to consult and to guide them in their mastery of the more difficult problems which arise in the manufacture or sale of popular merchandise.

A scant fifty years virtually covers the time in which the art of photography has become possible, popular, and, in some cases, profitable. Up to within the last five years, one engaging in the work of developing and printing for the amateur photographer has had not only to devise his own methods of production, but has had to design and to build most of his own machinery and equipment for his plant to manufacture the final product—the photographic print, which is the tangible and desired result of photography.

Last, but hardly least, he has had to formulate his own code of business-ethics. Although there has been, in the last few years, a noticeable increase in the number and effectiveness of the various appliances needed in the production-end of the work, it has seemed to me that until lately there has been but little effort on the part of most finishers to establish a basis of fair dealing. That is, to give the buyer really good and *lasting* negatives and prints, and to assure the finisher a profit; at the same time, to sell the work at a reasonably low price—consistent with a fair profit—so that the amateur will be induced to keep on making pictures, because of the low price at which he can obtain good finishing of his film or plates. This is important.

I am of the opinion that few men are successful in business unless they enjoy the business they are engaged in; and I believe that it is just as important to the consumer as it is to the merchant, that any work produced in the course of any business should be profitable work. It seems obvious that a man cannot get much pleasure out of a branch of his business which he knows is not profitable, or upon which he is sure that he is losing money.

In my experience that covers over eleven years in serving the amateur photographer, it has become impressed upon me that probably only one person in about thirty or forty does any part of his own photographic work, except snapping the shutter. Consequently, good work,

or good prints, the result of good workmanship, is the only result which will keep the "shutter-snappers snapping." Therefore, I believe that the manufacturer of amateur supplies, the photo-dealer, and the amateur who uses the goods, are directly dependent upon the conscientious, square-dealing photo-finisher for a continuance of the enjoyable hobby of amateur photography.

I believe that there are numberless opportunities for young men to establish and to build up for themselves a profitable business in carrying photographic goods, and in doing photo-finishing for amateurs all over this great country. If you could read the experiences and see some of the work obtained elsewhere by some of our mail-order customers, you would agree with me. The pleased customer is so sincerely grateful to you, simply because you do not spoil his films, that, next to PHOTO-ERA Magazine, he becomes your best advertisement in his neighborhood! Read this simple statement from a letter received by me in March, from a middle-west patron: "The results were entirely satisfactory, and let me say, it is a genuine pleasure to see work turned out that showed it had been given *real care*. You are to be congratulated."

The point I wish to make in quoting this part of a customer's letter is that it should not have been necessary for this amateur photographer out in Missouri to send his roll of films half-way across the continent to Philadelphia. There should have been a photo-finisher with a good reputation in his own state, at least, if not in his own town. There probably is one who is competent; but he may be a poor advertiser.

Manufacturers of photo-supplies impress upon the dealer that the sale of a camera carries along with it a never-ending circle of business—the sales of film, accessories, and photo-finishing. I have not seen it remarked upon as yet that one of the most profitable sources of business comes from the reprint orders which simply must be given if the first prints submitted when the films are developed are finally made. One of our recent reprint orders was for fourteen hundred $2\frac{1}{4} \times 3\frac{1}{4}$ size prints—and from Boston, too! If the films originally developed by us had been poorly done, and filled with scratches, stains and dirt; and a carelessly made lot of prints had been sent to the customer, we should not only have lost the possible profit on such a substantial order of reprints, but the poor work would have chilled the enthusiasm of the amateur, and been a set-back for all concerned.

The dealer-finisher who is recognized as such, owes a duty to amateur photography. He must so execute his work that the "sport" or art—which ever you may choose to style it—may be bettered and made more popular and useful. Not only increased business, but pardonable satisfaction will come to the concern which endeavors to educate its customers to a better knowledge and practice of the work. I have in mind one of our early customers, who purchased his first Kodak from us and got our first-aid-to-amateurs about eight years ago. He informed me about two weeks ago that during the month of April he expected to get a substantial sum in cash as his share of a natural-color motion-picture patent-sale, as well as a share in the future of the company. Photography is a clean, healthful avocation, without a possibility of harm to those who practise it; and its opportunities for the increase of enjoyment and of material benefit to the human race have been as yet only scratched on the surface.

Some of our experiences in establishing a photo-service to the amateur, which has become known from Texas to Canada, may prove of interest to readers of PHOTO-ERA MAGAZINE. We do not agree with most authorities that "the customer is always right." A reasonable customer is a great asset to any store; but an unreasonable or an unjust one is a loss to any retailer, and the sooner you are rid of the annoyance of such customers, the more time and good temper you will have saved for the benefit of your better customers.

I suppose many will not agree with me on the above statement, and I am free to admit that several ideas we have instituted here have not been agreed with, at first. Take the matter of getting a deposit on all developing-and-printing orders. Several years ago we found that our uncalled-for orders were becoming too plentiful, and we made it a rule of the store to get a deposit of one-half the estimated amount of the finished order on all work amounting to fifty cents or over, and we also have made all enlarging entirely payable in advance. Some opposition, of course, develops from our customers; but tactful explanation of the need of such a ruling, and a showing the customer that if we did not get paid for all of our work, the good-paying customer would have to pay for the careless one's bills, overcomes the objections in most cases. Our friendly competitors assured us, derisively, that we could not "put it over"; but now we find most of them forced to do the same thing, even to some of the department-stores and drug-syndicates.

And you would be amazed to see the amount

of uncalled-for work we have here at the end of every busy season, on most of which a prepayment has been made. You see, people will move away, or forget, or lose good jobs, or even lose the friends for whom they have ordered big quantities of reprints. We found in one year an accumulation of over two hundred dollars' worth of uncalled-for work, and right then our deposit-rule was born! In one case, where we bought part of a store-stock at auction, we found among the materials acquired, over forty pounds of uncalled-for films and prints in envelopes. By the way, that auction-sale was a sheriff's sale for unpaid rent!

The dealer-finisher owes it to the customer to exercise every possible care to develop his films in a workmanlike manner. He cannot do this if he practices the "free-developing habit." No work of any value can be produced at no cost to the buyer. If the cost of the developing is added to the price of the prints, then the prints must be made of inferior quality, or the price must be excessive; and each customer must suffer if he goes back and orders reprints because of that excessive print-charge. There is no middle ground, as I see it. The worthwhile customer does not wish you to serve him without charge. Indeed, if he be worthwhile, he will at once be skeptical about your ability to supply him with the good service he requires if he learns that you are willing to do something for nothing. He knows that he could not do it in his own business, and is satisfied that if your work is worth having, you would not have to do so either.

I have seen amateur photography discussed from every angle in many publications; but seldom from the standpoint of the dealer-finisher. I have been in hopes that a forum-column for the discussion of problems in this constantly increasing profession might be instituted in PHOTO-ERA MAGAZINE. I feel sure that it would be beneficial to the photo-finisher, and would prove instructive to everyone who is interested in photography.

I was interested, if not amused, upon hearing recently a photographic lecturer advise professional men to line leaky wooden tanks with cement to make them waterproof. We had just paid a carter to carry away a tank we had had for several years, which always leaked, even though it had three coats of cement put on by two different firms, both of whom were sure that it could be made to hold water.

A discussion of what the right price for developing and printing of quality-work should be, ought to be a subject of vital importance to all concerned. There are wide variations in



SUMMER

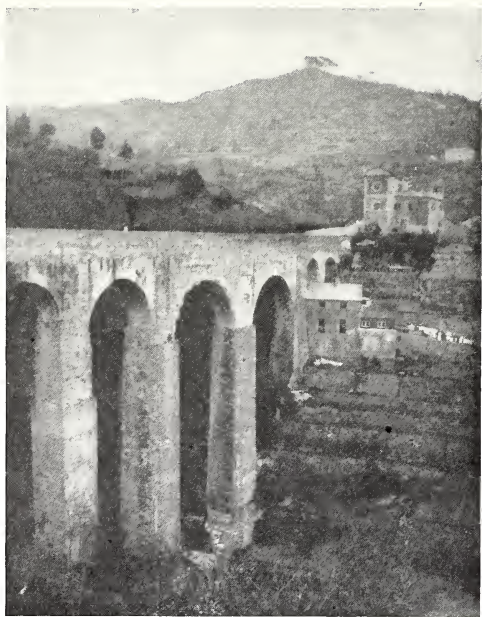
W. A. BURNHAM

prices in different localities and quoted by different firms. What is a standard or equitable price? I note an advertisement in one magazine which offers to develop one film and make six prints for 25c. Our price would vary from 40c to 52c, according to size; others are higher than we are. Are we at fault, after eleven years' experience; or is the advertiser, and others in the same class, unable to deliver a definite, good quality of work? If so, what happens to the work of the amateur who entrusts valuable or sentimental films to such a photo-finisher?

There are many difficulties in the conduct of a photo-finishing business for the amateur. These difficulties, we find, are frequently overcome by the finisher giving inferior work, on the principle that the amateur does not know any better, and will take anything. I have had that argument given me numberless times by many photo-finishers, and it has been one of the most compelling reasons for me to stick to this business in discouraging times. I was convinced, and am to-day, that a photo-finishing business can be made as self-respecting and as lasting as any other service-business in any other line. And I believe and have proved that the amateur will appreciate the quality and help to make the service profitable. I believe sincerely that the future of amateur photography and its popularity will depend upon the ability of the amateur to get really professional work in the finishing of his films and plates.

The photo-finisher must expect to give the amateur advice and such instruction as will prevent repetition of past mistakes; he should try to develop films so as to bring out the best that the inexperienced amateur's efforts permit. He should use papers in making prints which will give the best contrast possible from the differing negatives. He should make negatives and prints that will keep for years. How many photo-finishers know when a film or a print is properly fixed and washed, and will fix and wash them so that they are reasonably permanent? The photo-finisher should not promise work at a time when he knows that he cannot make workmanlike delivery. I do not believe in so-called eight-hour or twenty-four hour, or daily delivery-service. The delivery is and always will be dependent upon the amount of work in the shop in advance of the orders just taken. If too much work is promised for a certain delivery time, either quality or temper will suffer—both to the detriment of photography in general, and the dealer in particular.

The amateur should patronise those dealers who maintain a photo-finishing plant as part of their service, in preference to those who do not. The experience constantly acquired in his finishing-plant makes the dealer better qualified to advise you how to use the goods that are obtainable for your hobby. Such a dealer also assumes responsibility for the quality and age of the materials used; also, the proper treatment



THE ANCIENT AQUEDUCT

LOUIS A. DYAR

of the exposures after the customer has done his part under the advice of the dealer. Thus may the best results be expected, to the benefit of both.

The dealer operating a finishing-plant is under heavy expense to carry on the plant and to retain skilled employees during the dull seasons. He is entitled to your film and accessories purchases so that the profits made from the sales of these articles will help him to maintain a quality-service which will be to your benefit. The irresponsible seller of a few articles of the most popular part of the line can easily become harmful to the amateur if he becomes so numerous that the great part of the selling-profit is diverted from the established and responsible dealer.

The amateur should be willing to pay a deposit on all finishing work that he orders. On any other article of general manufacture, if the customer for some reason does not call for or pay

for the goods, some part of the cost of making same may be salvaged by the sale of the uncalled-for goods to some one else, even if sold at a very much reduced price. However, it is obvious that uncalled-for developing and printing is nothing but so much waste-paper and celluloid, and therefore a total loss to the photo-finisher. It would be well if amateurs remembered this.

If you could be privileged to study the care and attention that must be given the proper conduct of a really efficient and successful photo-finishing department, you would gladly extend your patronage to that dealer who served you well in this branch of photography. Next to the proper manufacture of the films and the photographic paper, the photo-finishing of the work is the most important part of amateur photography—the avocation which increases, but never interferes with the pleasures of all other amusements, sports, or hobbies.



EDITORIAL



Some Painters' Idea of Pictorial Composition

THE late John J. Enneking, landscape-painter, philosopher and keen observer, learned much from the work of photo-pictorialists, during the last two years of his life, and was not afraid to admit it. Not only this; but he applied to his work the lessons derived from the study of pictures by American and English amateur-photographers, and earnestly explained them to his fellow-artists whose pictures suffered from poor composition. He dwelt with emphasis on the fault of dual interest, or several pictures contained within the limits of one—so common with painters whose training and preparation has been inadequate. The Editor remembers with no little amusement how Mr. Enneking used to scold his less fortunate fellow-artists, telling them that the very photographers whose work they scorned, excelled their own in simplicity and unity of pictorial design. Still, there are many painters of landscape, genre and still-life who continue to pay little or no attention to composition. Their pictures may be seen at almost any public exhibition, including one held in the Hub during the past three months. The painters' excuse is the paramount importance of the color-scheme. Color must dominate the picture, and through color alone the picture must prevail. Doubtless, they are right. Their choice is their privilege. Nevertheless, when color alone will not carry the day, and the composition is positively bad, what then?

A certain Boston painter whose landscapes enjoy a fair degree of popularity and—what is very important—sell at prices of three figures each, fills his pictures with a wealth of detail, colors them delightfully, but introduces several points of interest, so that the eye, wandering hither and thither, becomes weary and longs for a spot where it may rest. This description fits an attractive brook-scene, which offers a number of beautiful climaxes, as it were, whereas if they could be reduced to one—one entrance or one exit, one spot of supreme interest, the picture would gain in repose and pictorial value. Another painter—and he is not without his fellows—was pathetically elementary. He believes in absolute symmetry. Fortunately, he was represented by only one offence in the same exhibi-

tion to which allusion has been made. It was a wood-scene. A large, evenly shaped boulder occupied the exact center of the picture with a slender tree standing at the left and its twin-brother at the right, the whole forming what is known as a blotter-design. The idea is to imagine a straight vertical line in the middle of a flat medium—paper or canvas—then to paint on the left section one half of the large boulder—ending abruptly at the imaginary line—and the slender tree at its left. This done, the right (empty) section is folded over the painted one, firmly and evenly pressed, laid back in its original position—and behold!—the completed picture appears. This is symmetry carried to the extreme. Still another picture, executed with soldierlike precision, was observed in this art-collection. It represented a still-life, painted with rare technical skill. In the middle of the canvas stood a large, handsome cloisonné vase in brilliant colors and, at each side and equidistant, a tall, lighted candle set in an elaborate, bronze candlestick, the two sentinels forming a twin-pair. There were other examples of poor and inartistic design in this collection, but a description of them would be superfluous. Nor is the work of better-known artists free of faults in composition. Such painters as McKnight, color-specialist, and Tarbell, interior decorator, throw the principles of composition to the winds. The latter's picture in the Corcoran art-gallery, Washington, shows strongly divided interest and contains two separate, complete pictures!

All this goes to show that some artists of the brush are weak or primitive in pictorial-composition, and commit faults of which no self-respecting photo-pictorialist would be guilty. It would be folly, therefore, for ambitious pictorial-photographers to study modern paintings, indiscriminately, for the purpose of benefiting by composition, which painters express more often by color than by objects.

In portraiture, genre, still-life, landscape and marine, artists of the brush—not all of them—are behind the photo-pictorialists in originality, beauty and grace of pictorial design. They may enjoy with profit the masterpieces of the English, American and German schools of pictorial-photography, as distinguish the English and American photographic salons, and the regular shows held by the leading American camera-clubs.



ADVANCED COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.



Prizes

First Prize: Value \$10.00.

Second Prize: Value \$5.00.

Third Prize: Value \$2.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Prizes may be chosen by the winner, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, of artistic design, suitably engraved.



Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. **No more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Remember that subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.** Prints on rough or linen-finish surface and sepias are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. All prints should be mounted on stiff boards.

3. *Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data.*

4. *Each print entered must bear the maker's name and address, the title of the picture and name and month of competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for a 2-cent stamp. Be sure to state on the back of every print exactly for what competition it is intended.*

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, this does not prevent the photographer from disposing of other prints from such negatives after he shall have received official recognition.

6. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins; but in every case, prints should be protected by strong, stiff boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

7. Competitors who have won three first prizes within a twelve-month, become ineligible for two years thereafter. The too frequent capture of the first prize by one and the same competitor tends to discourage other participants and to make the competitions appear one-sided and monotonous.

Awards—Summer-Sports Competition Closed June 30, 1921

First Prize: Dr. Frank P. Smart.

Second Prize: F. W. G. Mochus.

Third Prize: Kenneth D. Smith.

Honorable Mention: C. M. Campbell, Carl S. Davis, Dr. Clinton L. Decker, Mrs. W. F. Eldridge, J. H. Field, George W. French, C. W. Gibbs, G. W. Gould, G. Robert Jernberg, Alexander Murray, Harold B. Neal, Ozan K. Nunome, Ford E. Samuel, John Smith, George A. Stephens.

Subjects for Competition—1921

"Winter-Sports." Closes January 31.

"Home-Portraits." Closes February 28.

"Copying Works of Art." Closes March 31.
(Paintings and Statuary.)

"Home-Scenes" (Interior). Closes April 30.

"Street-Scenes." Closes May 31.

"Summer-Sports." Closes June 30.

"Summer-Flowers." Closes July 31.

"Marines." Closes August 31.

"Outdoor-Genres." Closes September 30.

"Architectural Subjects." Closes October 31.

"Domestic Pets." Closes November 30.

"Indoor-Genres." Closes December 31.



Photo-Era Prize-Cup

In deference to the wishes of prize-winners, the Publisher will give them the choice of photographic supplies to the full amount of the First Prize (\$10.00), or a solid silver cup, of artistic and original design, suitably inscribed, as shown in the accompanying illustration.

Competitors Must Mind the Rules

COMPETITORS, in the Advanced Workers' and Beginners' Competitions, are inclined to ignore some of the rules, one of which is that the name and address of sender, also name, month and kind of competition must be written plainly on the back of each print. Otherwise, how is the jury to know? Besides, the Editors are too busy with other matters to stop to write to the careless competitor for missing information.

This is often the reason why careless entrants wonder what has become of their prints.



TRYING HIS LUCK

DR. FRANK P. SMART

FIRST PRIZE—SUMMER-SPORTS

The Behavior of Lenses

It has been announced, and, indeed, almost goes without saying, that the very complete photographic equipment of the Mount Everest Expedition underwent severe preliminary examination at the National Physical Laboratory at Teddington. That is as it should be, says a writer in *The British Journal*, since, in such cases, not only ought no risks to be taken, but it is necessary also to select by careful competition among various available types the best, at any rate for the purposes in view. In all ordinary circumstances the individual photographer who buys a new first-class lens may be satisfied that his instrument has undergone tests which, if not as comprehensive as those applied at the National Physical Laboratory, are eminently practical, and calculated to assure the performance of the objective under any reasonable conditions. But lenses are often acquired as to the behavior of which no sort of certainty can be felt. Even if they bear the names of good makers, they may have been subjected to rough usage, or their qualities may have been impaired by the mere effluxion of time. As a matter of fact, most of the lenses made forty-odd years ago are "wearing" very well. The glass is hard, and the mounting solid and generally of excellent workmanship, as befits a product of the Victorian Age. Here and there re-balsaming and a touch of dead-black varnish may be needed; but there are thousands of old

rapid rectilinears, rapid and "portable" symmetricals, and wide-angle lenses now doing just as good work—and very good work it is—as they did nearly half a century ago. With some of the later introductions it is impossible to feel the same confidence. The formulae to which they have been constructed may be impeccable. But not infrequently some of the glasses used are soft or liable to change of color, the mounting is flimsy, and the quality of endurance is sacrificed in order to procure extreme and often unnecessary portability.

It is a postulate that the potentialities of modern lenses are greatly in advance of those of the older instruments; but we are talking now, not of possible performance, but of actual behavior, and our belief is that the actual behavior of many fine up-to-date objectives after hard wear and tear, or in difficult circumstances, is not all that could be desired. Some of the deficiency, no doubt, is unavoidable. Where extreme rapidity and other special qualities are essential it may be necessary to use abnormal glasses, the surface of which is rather tender, and the permanence of which in regard to color cannot be guaranteed. But the all-round standard of mounting is not as high as it ought to be, and would be if more attention were paid to the behavior of the lens in the hands of the average worker, and less to its size and appearance. It was a bad day for lens-making, for instance, when aluminium first came to be used for lens-mounts. Some of the later



ON THE WIND

F. W. G. MOEBUS

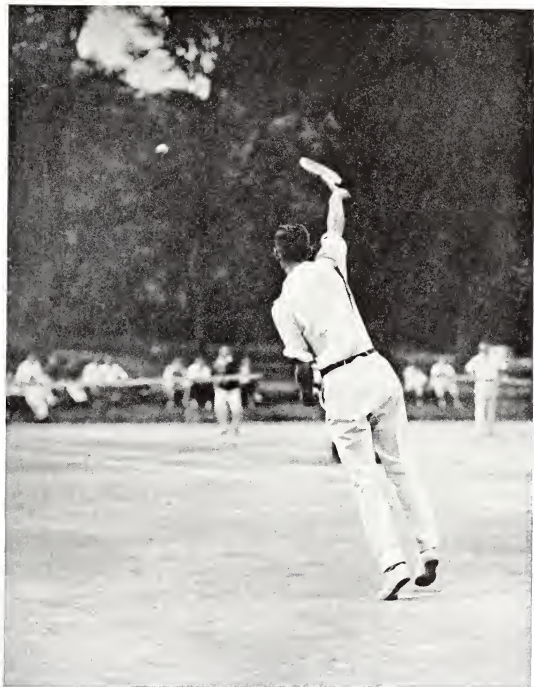
SECOND PRIZE—SUMMER-SPORTS

alloys of aluminium, no doubt, are very satisfactory, and the gain in lightness is often most acceptable. But we shudder to think of the hundreds of good lenses which have been put into mounts utterly unfitted to stand even ordinary usage for more than a few years at most. As to aluminium-screws, especially when their intercourse with brass-flanges has been "frequent and free," the less said the better.

The average British manufacturing optician doubtless knows his own business extremely well, and it might not be entirely to his advantage if his lenses, and more particularly, perhaps, his photographic lenses, lasted indefinitely. But still less will it be to his ultimate advantage if, say, twenty years hence, it will be a not uncommon observation that So-and-So's old lenses can no longer be trusted, because their mounting has become defective, and can only be replaced at prohibitive expense. Lens-makers accordingly might consider the suggestion that, as an alternative to the

mounts which they are constrained to supply to amateurs craving for extreme portability, and to makers of cameras in which the size of the lens is an important consideration, they should make a mounting of a more substantial and really workmanlike description. This in most cases might advantageously include a hood, which all the old lenses used to have, and which unquestionably often improves the behavior of lenses, especially when working against the light. Of course, the extraneous light can be screened to some extent from a hoodless lens by holding a hat over it, but nowadays amateurs, at any rate, are not as a rule taught very thoroughly, and this simple precaution, very seldom omitted by practical workers, even when lenses were hooded, is often neglected with anything but pleasing results.

The behavior of a lens may depend, not only upon the manner in which it is handled, but also upon the reasonableness or unreasonableness of the demands im-



THE SERVE

KENNETH D. SMITH

THIRD PRIZE—SUMMER-SPORTS

posed upon it. The protean capacity of some lenses, as quite legitimately advertised for the edification of those who cannot afford more than one or two objectives, is responsible for some exaggerated hopes of the performance of these instruments when used otherwise than in their normal arrangement. With a very few notable exceptions the single components of double and triple combinations do not work really satisfactorily at full aperture, a point which may be readily determined by going over the image on the focusing-screen with a focusing-magnifier, and comparing the definition with that given by the complete lens. The same remark may be applied with increased emphasis to the behavior of ordinary telephoto-combinations, as distinct from highly-corrected single-focus tele-lenses, such as the Telecentric, the Dallin, and the new Cooke. But the mistake is often made of expecting too much from complete double and triple combinations, especially where these have a very large full aperture. It is probably safe to say that only very occasionally does an

F/4.5 lens stopped to F/11 cover a plate two sizes larger than that for which it is listed as satisfactorily as an F/6.3 lens of the same focal length may reasonably be expected to cover it at the same aperture. It is not quite fair to ask that it should, any more than it would be reasonable—assuming that one dared!—to ask a highly-trained chef or "upper housemaid" to do the work of a "general." Photographic lenses are mostly very excellent tools, doing what they profess to do with precision, and often doing a great deal more quite passably, or even admirably. But if, to borrow a term from another science, their potential is high they must be as Dickens' butcher in "Martin Chuzzlewit" said of meat, "humored and not drove."

A Roast

AMATEUR-CAMERAIST (showing latest pictorial photograph)—"It's the best thing I ever did."

CRITIC—"Oh, well; you mustn't let that discourage you."—*Exchange*.



SUBJECT FOR NEXT COMPETITION ADVANCED WORKERS



MOUNT VERNON—AN AMERICAN SHRINE

CARL H. KATTELMANN

EXAMPLE OF INTERPRETATION

Advanced Competition—Architectural Subjects. Closes October 31, 1921

It is very satisfying and encouraging to note the *real* interest that is shown in our monthly competitions. As I have said elsewhere, the Editors of PHOTO-ERA MAGAZINE conduct these competitions with the desire to encourage and to stimulate workers to make the most of the art and science of photography. We are eager to help every reader to become a success photographically. To that end, we maintain high standards and, at times, we may appear to be hypercritical; but we are making a sincere effort to convince the amateur and professional photographer that only the best thought, effort and workmanship will enable him to obtain the greatest pleasure and benefit from photography.

We believe that those camerists who have been doing their best to make acceptable speed-pictures, out-door genres, street-scenes, summer-sports and marines will welcome a competition that has for its subject one that does not run, fly or swim away—to the consternation and disappointment of the ambitious worker. Buildings do not run away, nor do they become restive. There is much satisfaction to be able to take as long as one wishes to focus and compose a

picture. However, because buildings make less active subjects, is no reason that architectural photography does not demand consummate skill. In all photography, there is no subject that requires such attention to light and shade, to point of view and to treatment. Moreover, there is a certain amount of responsibility associated with architectural photography in the sense that the camerist is endeavoring to perpetuate pictorially some of the highest intellectual and beautiful expressions of the architect. A beautiful building—and there are many in every city and town—is as much a work of art as a beautiful painting or photograph; and, when the worker attempts to photograph such a building, let him not forget to retain every line as the architect intended it should be—otherwise, the picture will become but a record-photograph.

In this competition, photographs of domestic, church, commercial and government buildings are acceptable. The purpose is to have workers confine themselves to subjects that represent architecture. An old farmhouse may prove to be an excellent example of Colonial architecture and thus would be welcome to the jury. Buildings in towns and villages are as promising subjects as those in large cities. A Colonial town-hall or a library in a New England village may be made as picturesque as an old Spanish monastery

in California. The tremendous sky-scrappers of New York City are a constant invitation, by day and by night, to the intelligent worker. My object in mentioning these subjects, indiscriminately, is to convey the idea that any building that possesses pronounced architectural interest and beauty, is a suitable subject for this competition. The point to remember is, to select some bit of architecture that makes a strong appeal and to photograph that in preference to another bit that is apparently lifeless and cold.

One of the most important preliminary steps in the photography of all architectural subjects is a thorough study of every possible point of view. There will always be one point from which the best result may be obtained. As soon as this has been determined, a careful study of light and shade should be made. After many unsuccessful attempts "to get things just right," the camerist may find that by night his subject becomes alive with the very effect that he cannot obtain by daylight. Often, an artfully concealed street-lamp works wonders. In some cases light from within the building enables the camerist to obtain the desired effect. Whenever possible, it is well to make the picture tell a story. Moreover, the worker who can get away from a purely commercial reproduction is to be praised. Of course, many subjects are without even the semblance of a story; but there are likewise many that combine architectural beauty with artistic and spiritual feeling. There is an old adage that is particularly applicable to architectural photography: "Do not bite off more than you can chew." If a beautiful façade is preferable to the picture of an entire building—photograph the façade and let another camerist attempt the entire building. There are many buildings that are so situated that it is virtually impossible to include their entire length or breadth on the plate or film. Even by using a wide-angle lens, the desired result is not to be obtained. In such cases, the intelligent worker will confine himself to a part of the building that will lend itself to the best advantage. Incidentally, it is interesting to note that architects of international reputation are using the camera more and more to aid their work and to record their own technical and artistic development.

Nothing in architecture is more beautiful than a high tower, either standing alone or as part of a building. At the same time, there are few more difficult subjects to photograph. Unless the camera is equipped with a rising-and-falling front, or a swing-back, it may be well to seek other subjects, for a tower that is not plumb, or one that is distorted, will be rejected at once by the jury. In some cases, the camerist may be fortunate enough to obtain the desired result at some distance from the subject by using a telephoto-attachment. The worker should always remember that the plate or film must be absolutely parallel to the upright lines of the building to be photographed, otherwise the subject will appear larger at the top or bottom or vice versa—according to the direction of the camera, upward or downward. Attention to this is advisable also when photographing from a housetop or a window. The use of wide-angle lenses is often necessary, although their use should be curtailed as much as possible in order to avoid distorted perspective. It is preferable to get far enough away to make the use of a wide-angle lens unnecessary. True enough, this is not always possible. However, it may be seen readily that architectural photography involves much technical and artistic skill; and that personal initiative is no small factor to obtain successful results. Of course, there are difficulties such as street-traffic, waving trees or plants and the ever-present small boy;

yet, in the main, the camerist has an easier time of it along the lines of work that are usually difficult. It is a good idea to select a time of day when conditions favor the worker in every way possible. It may be early morning or late afternoon; whichever it is, the camerist should make the selection carefully.

Perhaps in no branch of photography is the question of exposure of more vital importance than it is with regard to making pictures of buildings. Experienced workers know that a white marble building requires less exposure than one made of red sandstone even though both buildings are lighted by bright sunlight. Likewise, it should be remembered that deep shadows underneath porticos and doorways require more exposure despite the fact that the sun may be shining brightly outside. The old maxim to expose for the shadows is very much in force with regard to architectural photography. In all cases, careful attention should be given to the material of which a building is constructed, particularly with regard to the color of the entrances, façades, porticos and other parts of the building that differ in color from the main building. Since colors may be photographed to greater or lesser advantage, it may be seen that a white building with green trimmings would require different treatment from a red building with white trimmings. These little points may appear to be superfluous; but successful architectural photography takes these very details into strict account. Needless to say, a reliable exposure-meter, color-screen, tripod and orthochromatic plates and films are essential to success. Of course, excellent photographs are made without these accessories; but the chances of success are better if the camerist is equipped properly. Several manufacturers of standard color-screens (ray-filters) issue booklets that are very illuminating with regard to the successful use of color-screens and orthochromatic plates and films. It will be well worth the time to read one of these booklets before making a picture of any building that possesses unusual decorative colorings.

There is another point with regard to architectural photography that is sometimes overlooked. It is not strictly photographic, but it is very interesting and profitable, nevertheless. I refer to the educational value of this branch of photography. Unless the worker positively sets his mind against it, he is virtually compelled to assimilate historical and other information of value. It does not seem conceivable that a camerist could photograph a beautiful public building without inquiring a little into its history. For this reason alone, the present competition may be used to great advantage by amateur and professional photographers who may wish to combine the study of history and the mastery of architectural photography. This suggestion was accepted last year by several workers very much to their pleasure and benefit. In fact, one camerist used the pictures and information obtained for an article that brought him a handsome financial return. It is of distinct advantage for the worker to own one good textbook on architecture, and those who do not care to own one can obtain many excellent books at the public libraries. In short, the greater *real interest* the camerist shows, the better pictures he will make and the more he will enjoy photography. As I have said so many times, it is the successful worker that gets the most out of photography. To make a success of it, there must be plenty of hard work and enthusiasm on the part of the camerist. Take my word for it, it pays to give one's very best. The returns in awards, honors and fame will take care of themselves.

A. H. B.



BEGINNERS' COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U. S. A.

Prizes

First Prize: Value, \$2.50.
Second Prize: Value, \$1.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Subject for each contest is "*Miscellaneous*"; but original themes are preferred.

Prizes, chosen by the winner, will be awarded in photographic materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

Rules

1. This competition is open only to beginners of not more than **two** years' practical camera-activity, and whose work submitted here, is **without any practical help from friend or professional expert**. A signed statement to this effect should accompany the data.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints from $2\frac{1}{4} \times 3\frac{1}{4}$ to and including $3\frac{1}{4} \times 5\frac{1}{2}$ inches, and enlargements up to and including 8×10 inches.

4. Prints representing **no more than two different subjects**, for any one competition, and printed in any medium except blue-print, may be entered. They should be simply and tastefully mounted. **Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.** Prints on rough or linen-finish surface paper and sepias are not suitable for reproduction, and should be accompanied by smooth prints that have the same gradations and detail.

5. **Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data. Criticism at request.**

6. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, he may dispose of other prints from such negatives after he has received official recognition.

7. **Each print entered must bear the maker's name, address, instructions, the title of the picture and the name and month of the competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type, and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for 2-cent stamp. Be sure to state on the back of every print for what contest it is intended.**

8. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins, but in every case, prints should be protected by strong, **stiff** boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

Awards—Beginners' Competition Closed June 30, 1921

First Prize: Paul H. M. Vanderbilt.
Second Prize: Arthur Gillam.
Honorable Mention: John J. Griffiths, C. H. True.

The Beginner and the Record-Picture

Of late, there has been considerable mention of the distinction between a *record-photograph* and a *picture*. Briefly, we are told that a record-photograph possesses no especial artistic value and that it serves merely to record a place, event, person or object. A picture, on the other hand, is a joy forever—it is art and technique combined in a pleasing ensemble. Very well; but how does this work out in the case of the average beginner? Usually, with little success. Why? Because the average beginner is neither master of himself, artistically, nor is he expert enough, photographically. In short, to talk composition to a beginner, who cannot focus a camera properly, is like discussing the advantages of a Twin-Six Packard with a man who cannot drive a Ford.

Those who read these little articles from month to month are aware that I would encourage every beginner to make the most of photography and to learn all that he can about art, composition and technique. However, in this article I have in mind the person who is not ready to assimilate advantageously the well-intentioned suggestions from those of riper photographic experience. One cannot expect a man who is unable to keep afloat to be very much interested in a detailed description of how to do the "crawl" stroke in swimming. What he would like to know, first, is how to keep afloat. After that, he might be better able to understand the "crawl" stroke and more likely to attempt it successfully.

A few weeks ago, I received a six-page letter from a beginner who asked for detailed information with regard to gum, ozobrome, platinum, carbon, and other printing-processes. Incidentally, he enclosed three very poor prints made on blue-print paper and stated that he had been making pictures for several weeks! Although I complimented my correspondent for his ambitious photographic program, I suggested that it might be well for him to master the technique of making first-class blue-prints before he attempted gum or ozobrome-printing. A few days later, I received a reply in which he thanked me for the friendly advice and added that "one of those pictorial photographers buttonholed me the other day and insisted that I should begin at once to make gum-prints and not bother with other printing-processes."

Would that it were possible to reach the goal of our aspirations by the short-cut route! Fortunately, and for our own good, an All-Wise Providence compels us to toe the mark ere we can win the race honorably and achieve success. Hence, my point is that the beginner is in no position to make definite and satisfactory progress until he has mastered the rudiments of photographic technique. If he cannot make a good blue-print, how can he be expected to understand carbon printing? It is all very well to speak to him of



GUARDIANS OF THE FIELD P. H. M. VANDERBILT

pictorial balance, play of light and shade, masses, high or low key, triangular composition and other art-terms; but if he cannot make a good blue-print, focus the camera, set the shutter and compose the picture, wherein does the beginner in photography gain?

It seems to me that the direct way to photographic success is to master one thing at a time. Let the beginner make record-pictures until he makes *good* ones and does so consistently. Then, talk to him of art-principles. In fact, I would prefer to see a beginner remain always as the maker of *good* record-pictures than to see him attempt pictorial photography until he is ready to make a fair success of it. Our good friends, the pictorial photographers, have every right to be enthusiastic and to sing the praises of their art to all who will listen; but for the good of the beginner, let me say that he should make haste slowly. The problems that we have solved are simple to us now; but they were not so in the beginning. Hence, all of us should remember that we must help the beginner to make good record-photographs before we arouse his interest and enthusiasm in the deeper subject of pictorial photography. In the end, such a course will prove to be of mutual benefit and will promote permanent photographic growth.

If the beginner will make up his mind to stick to the rudiments until he has placed himself in a position to make a *good* record-picture, whenever he may wish to do so, he will then have built his photographic

house upon a solid-rock foundation. No matter what uncertain success he may have with ozobrome, he *knows* that if he needs a good print he can make one on a developing-paper. In short, he has a proved means to an end, whatever happens. What I regret to see is the beginner who gropes blindly from one intricate process to another—making a success of none—the while using the terms of pictorial photography to describe or to excuse the “pictures” that he has made. All honor to the ambitious beginner who attempts ozobrome *after* he is able to make good record-photographs. More likely than not, if he fails to make a good ozobrome he will laugh over it and try again; but he will not seek to justify his own failure under the guise of having originated something new in pictorial photography.

By all means, use soft-focus lenses and as many photographic developing- and printing-processes as may be found in photo-textbooks; but let us remember that these are the times when “back to normalcy” is the slogan. Let us have *good* record-photographs and *good* pictures. Let us have pictures that justify their existence at a glance and that need no “explanation.” Therefore, let the beginner see to it that he builds on the firm foundation of accurate knowledge and superior technical skill. Before he realises it, he will achieve the very results that other methods appear to promise more quickly but not so surely.

A. H. B.



CURIOUS

ARTHUR GILLAM

Preservation of Negatives

THE time perhaps has gone by when it is necessary to caution the technical photographer as to the importance of thorough fixing and washing, and particularly the former, as a condition for the reasonable permanence of negatives. But it may be doubted if makers of negatives, generally, give sufficient consideration to other factors which greatly determine the physical permanence of the gelatine-film which bears the silver-image. It is quite true, *The British Journal* goes on to say, that in many cases this is not a matter of great importance, since defects of this kind make their appearance only after the lapse of a considerable number of years. Nevertheless, instances have come before us of very grievous experiences, for example, the rotting of the films of a whole series of valuable negatives. Although precise evidence of the cause of such deterioration as this is lacking, it is probably more than a coincidence that negatives which have suffered in this way were made in the days when it was customary, on account of frilling difficulties, to use an alum-bath before fixing. Apparently, the employment of the modern fixing-hardening bath is less open to objection on this score, but at the same time we think it is a sound maxim that for the utmost permanence of the gelatine-film of a negative the latter should have come in contact only with neutral or alkaline-solutions from start to finish. Alum, apart from its tanning-properties, is a weakly acid substance, and the deleterious effects which it appears to produce in course of years may very likely be occasioned also by purely acid baths, for example, the weak solution of hydrochloric acid, which is recommended to remove the final traces of

phenosafranine dye from plates which have been desensitised before or during development. The experience of years undoubtedly points to the advantage of following development by a fixing-bath which is neutral or alkaline.

A Tripod-Suggestion

ONE simple device which Mr. H. W. Bennett mentioned at the Professional Photographers' Association Congress is worth a note, if only because it is one of those things which, because they are so simple, usually have to be made at home. It is designed to prevent the feet of the tripod slipping on a stone-floor, or similar uncertain surface, and consists of nothing more elaborate than three laths attached together at one end so that they can be spread out flat upon the floor. At the other end of each lath a small hole is made to receive the point of the tripod-leg. With this help a tripod can be extended with perfect safety upon the most slippery floor imaginable; while, by having more holes than one in each lath, the separation of the legs can be controlled. Such a device as this is serviceable also for work on highly polished wood-floors, or elsewhere, when it is important to protect the floor from any possibility of scratching due to the metal points. An alternative method which some photographers have found useful to prevent slipping is to carry a length of string with four loops in it: two of these, at the ends of the string, are slipped over the points of one of the legs of the tripod, and each of the other loops over the point of one of the other legs.—*The British Journal*.



THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



Grain in High-Speed Plates

THE recent tendency among plate manufacturers to produce plates of very high speed has given rise to a trouble that appears to be inherent with all plates of great rapidity, says *The Amateur Photographer* editorially. The higher the speed of a plate-emulsion the more likelihood there is of the image being marred to a certain extent by an obvious grain, and in several batches of high-speed plates that we have tested this tendency has been very marked. It occurs more frequently when the exposures are on the short side or when development has been forced. In the case of negatives, therefore, when high-speed plates are used the presence of grain can be apparently reduced by full exposure and normal development. In negatives that have already been made and in which the grain constitutes a defect, as is frequently the case when the plate is a small one and the print is to be made by enlarging, the trouble can be overcome by fully exposing the paper on which the enlargement is made and by employing strong, quick-acting developer. If the worker has the opportunity of enlarging by daylight so that a broad expanse of light is the illuminant, the graininess of the image is much less obvious; but if artificial light and a condenser are used the graininess is frequently emphasised. The only way in this event to overcome it is to put the image slightly out of focus or to use a diffusing-medium, such as a piece of black tulle, on the lens.

Protection from X-Rays.

THE preliminary report of the Special Committee of Radiologists which was appointed to consider the question of protection against X-rays has been published, and the *Times* dealt very fully with the matter. We learn from the report that ventilation is regarded as being of very great, even of supreme, importance. The X-ray room should be not below ground-level. Artificial ventilation is necessary in most instances; for, with very high potentials, so-called coronal discharges are difficult to avoid, and these produce ozone and nitrous fumes, both of which are prejudicial to the operator. Darkrooms should be capable of being opened up to sunshine and fresh air when not in use. The walls and ceilings of these rooms "are best when painted, some more cheerful hue than black."

Color Kinematography

ACCORDING to a British report, "it may not be generally known that every dress worn by film artists has to be designed for color most carefully. The light pinks, blues, greens, mauves, etc., may all photograph alike; but if the color-scheme is wrong in the dress, the result on the screen would be blotchy. Unless one has actually seen these dresses in the studio, one can have no idea of their beauty. The color-schemes will no doubt have to be slightly altered; but that will be an easy matter. The producer to-day knows what effect he wants to gain, and he has to blend his colors accord-

ingly, often using colors different altogether from those he has in his mind. In the new color-photography this arrangement will be unnecessary. To give an example. A butler, or waiter, will wear the regulation outfit in the new film. In the studio to-day, he looks a weird individual. His shirt front is khaki, so is his collar; so are his cuffs; so is his serviette. Dead-white material sets up 'halation'—a glittering effect—yellow photographs white. Our natural colors are far richer than those in America, and better results should be obtained."

Direct Color-Photography in Medicine

THE demonstration of colored lantern-slides at the Section of Dermatology of the Royal Society of Medicine, says the *London Lancet*, showed the possibilities of this new method for purposes of illustration and teaching. Uvachrome diapositive lantern-slides are made from the original films employed in a new process of natural color-photography in which no screen is employed; the minutest details can thus be projected upon the sheet without the loss in accuracy caused by disintegration of the colors. The dyes used in the preparation of the films reproduce the original colors with remarkable accuracy. The process does not lend itself to mass-production; but it is found to be of the greatest value for scientific purposes. The slides are at present prepared by the Austrian State Institute of Photography, which keeps expert photographers at the disposal of the Viennese hospitals and clinics, so enabling accurate color-photographs to be made of cases of special interest. The negatives provide a record for the hospital archives, and furnish medical lecturers with the slides of individual subjects which they need. It is proposed to carry out the same work in England for the benefit of medical authorities in the hospitals and universities. If, as the makers claim, the films can be satisfactorily reproduced on paper, they should prove very valuable for use in text-books and in original articles on rare diseases.

Developing Cut Films

A GOOD many photographers who have been adopting cut films for portraiture and commercial work have found some difficulty to get as perfect negatives as they have been accustomed to with glass-plates, not with reference to the quality of the image, but to what may be termed mechanical defects. The principal trouble, says *The British Journal*, seems to be unevenness, caused by the fact that the film does not sink to the bottom of the dish as a plate does, but has a tendency to float, the slight curl causing the edges to be thin and streaky. Again, in fixing, if films are allowed to overlap there will usually be a line, especially if the developer is not well rinsed off. With care these defects may be avoided; but it is very much better to eliminate them, and also the risk of scratching during any of the manipulations by using the special clips and tanks made for the purpose. The film is inserted in the clip with the minimum of handling, and can remain in it until dry.



OUR CONTRIBUTING CRITICS



YOUR CRITICISM IS INVITED

Whoever sends the best criticism (not over 150 words) before the twentieth of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

As this picture is evidently intended for a landscape, the figure of the man should be eliminated, for he attracts too much attention and seems to block the way as the eye passes on to the distance.

As the picture represents a scene in the day-time, the foreground should at least be *seen*, and, if possible, about as the artist saw it, which must have been fairly plain. Even when there is but little foreground, it should be plain enough so that one can see what it is, and should *in itself* have *some* perspective which would help to carry the eye on into the distance. The tree-trunk seems too big; but if it were lightened some, at the bottom, and a good deal at the top, and given some appearance of roundness, it would not be bad.

Even then, when viewing it, the picture should not be held too near the eyes. A small boat or raft, or some small and not too conspicuous object on the water, a short distance from the nearer shore, and a little to the right, would undoubtedly help out the perspective.

WILLIAM H. BLACAR.



At first sight, the picture greets the would-be critic with a serenity so pleasing and peaceful, that one dreads to attempt a criticism of it. But on further inspection this feeling wears off, and one is bound to admit that the picture has its weak as well as strong points. The weakest of these is the too sharp contrast between the very dark foliage and undergrowth in the foreground, and the dreamy haze of the background. The remedy for this would be cutting the print, or using prevention rather than resorting to a cure. The picture could originally have been made



THE PICTURE CRITICISED THIS MONTH

from a point somewhat nearer the water. And the best of its strong points is that very hazy background, with its dimly outlined arch and the corresponding shadow-line in the water. A touch of humor, where humor is decidedly incongruous, is added by the figure in shirt-sleeves and a top hat.

Y. BILLY RUBIN.

IN the July picture, offered for public criticism, I seem to find that the artist has observed the rule the Editors constantly urge, viz.—a unity of interest. Here, he has focused the beholder's attention on the vista of the lake and mountains. The figure of the man seems to emphasise this tendency, though it may be that he is superfluous. While everything in the foreground appears to be in deep shadow, the character of some of the objects seems to be in doubt. Is that a stump, a rock, or a boat on the shore, near the man? What is the latter supposed to be doing? Would not the picture be improved if the heavy branches of the big tree, and the dark mass at the right, were not quite so black? Otherwise, the picture impresses me as one of beauty and grandeur, and of admirable proportions.

HELEN F. BIGBEE.

ON examination of this picture, it can readily be seen that there is subject for a very awe-inspiring picture if the maker had only handled it a little differently.

The picture demands the utmost concentration, for while trying to distinguish the lake and mountains, the deep shadows around the picture persist in drawing our eyes away. In the same way, the man is objectionable, being in the center of our gaze.

Of course, at six-thirty woods are very dark, while lakes and mountains are still pretty light, so that this excessive contrast is partly unavoidable, but by photographing the picture from the shore, instead of from the woods, the deep shadows and harsh contrast could be eliminated. The picture, at present, might be rendered softer by printing on the softest grade of paper.

WARWICK B. MILLER.

Improving Autochromes

IT may interest color-workers to know that Autochromes which are weak and lacking in brilliancy can often be greatly improved by binding them up with a second color-screen, instead of the usual piece of plain glass. These I have obtained from old and useless Autochrome plates by simply washing off the positive, or film, under the hot-water tap. The layer containing the starch-granules does not run, and when dry it is bound up, film to film, with the Autochrome. The positive is thus sandwiched between two color-screens. The result is a more granular and denser rendering than the original; but the colors are more intense.

L. M. LEVENTON, in *The British Journal*.



OUR ILLUSTRATIONS

WILFRED A. FRENCH



The frontispiece represents a New Hampshire dairy-maid waiting for the arrival of the cows from the pasture. The picture has an interesting history in that it formed the frontispiece of the initial number of *PHOTO-ERA* MAGAZINE, which was published May, 1898. The author also wrote the initial article that appeared in the first issue of this magazine (Volume I, No. 1)—“Art in Portraiture.” Furthermore, the first advertisement in that initial number was that of the author’s firm (Benj. French & Co., dealers in photo-supplies). While he or his firm had no interest in *PHOTO-ERA*, at that time, except in the capacity of an advertiser, he never dreamed that in 1905 he should become a member of the editorial staff of that publication, and least of all, later on—in 1907—become its sole proprietor and managing-editor!

When the “Dairy-Maid” was first published in *PHOTO-ERA*, it was in the form of a $4\frac{3}{4} \times 8$ Heliotype plate, whereas the present reproduction is a 4×6 halftone. Data: September, 1897; about 2 P.M.; good light; Voigtlander & Son Euryscope, No. 2; 10-inch focus; stop, F/18; 2 second; Carbutt Blue Label; pyro; Platinotype print.

The reasons that prompted charitable silence with regard to the Wolfeboro-pilgrimage pictures, by that precious pair of photo-pictorialists and arch-conspirators, Osborne and Turner, still prevail. They have received so much praise for their work in this department, in the past, that they can well afford to dispense with it, for the nonce.

Mr. Harry W. Poor’s view of Mt. Chocorua, page 115, is one that gives the characteristic shape of what alpinists call the “Matterhorn of the White Hills,” on account of its resemblance to the prodigious and almost inaccessible peak in the Zernatt Valley. Its rugged summit is visible from many different directions, but the complete form of the mountain can be seen from but few points including the spot, on the shore of Lake Chocorua, where Mr. Poor succeeded in obtaining an excellent view with a picturesque setting. If it had been possible to avoid the tall tree-trunk, at the left, the photographer would have been able to produce a picture less symmetrical in design.

The mountain, lake and district are all under the name of Chocorua. Many climbers of the mountain may remember the legend of Chocorua, wherein the white settler pursued the Indian, Chocorua, up the mountain and confronted him with a rifle, demanding his surrender. The Indian was supposed to be standing on a huge rock at the time, overlooking a precipice; and, rather than surrender, he jumped and was crushed on the rocks below. Before leaping, however, he uttered a curse on the whole region, which the old settlers said made it impossible to raise a calf on the district abutting the northern side of the mountain. The fact remains that an element in the water is said to be injurious to growing cattle. However, a reacting agent has been used with success. Frank Bolles, late of Harvard College, has written much of interest in his book, “At the North of Bearcamp Water.” The chapter, “A night alone on Chocorua,” is of great interest to lovers of the mountain. Beals, in his “Passaconaway, the Land of the Sky,” also contributes many interesting features. A book alone might be written of

this mountain, with its trails, unique history, and fauna and flora. The photographer’s great-great-grandfather was once caught on the peak of Chocorua during a severe thunder-shower. He climbed to the very top and found the sun shining brightly on the ledges, while beneath him rolled a sea of black clouds, through which he could see picturesque flashes of lightning darting now and then into the ravines, 2,000 feet below.

The former peak-house, a flimsy structure moored to the ledges by wire cables, was literally blown to pieces by a winter-gale. Household-effects were scattered at a great distance, and some ivory keys from an old organ were carried apparently three miles or more to the dooryard of what is now the Clement Inn. While climbing it, over the Liberty Trail, the photographer, Mr. Poor, has heard a black bear call during the middle of the day. These creatures usually call only at night.

A few years ago, some winter-climbers were observed toiling on the ledges of the peak. Through a powerful telescope, at the Chocorua Inn, one could see that all was snow and ice, when suddenly, one was seen to slip and fall. The observer judged that an accident had occurred. A horse and sleigh were dispatched to the foot of the mountain and, sure enough, one of the climbers had fallen and sustained a leg-fracture. Even the “Movies” have invaded the Chocorua region. At Paus Mills, under the ramparts of Chocorua, a few winters ago, Harold Lockwood, now deceased, assisted in filming a scene. Husky dogs and sledges from Wonalancet were employed to give it the “Touch of the North.” The picture enacted was seen in Boston, later, by a Chocorua enthusiast, who at once recognised the locality.

Data: Edge of Lake Chocorua, N.H.; August, 11 A.M.; bright sunlight; $6\frac{1}{2} \times 8\frac{1}{2}$ Poco Camera; recombination ($12\frac{1}{2}$ -inch focus) of Poco R.R. lens; stop, U. S. 64; 1 second; Wellington Anti-Screen plate; metol-hydro; Velox contact-print.

No mountain in southern New Hampshire is more familiar to tourists and visitors, nor more beautiful and interesting, than Mt. Monadnock. Being isolated, this glorious rocky mass may be seen in its entirety from hundreds of elevated points to the east, west, and south of it; whereas, viewed from the opposite side, along the shores of Lake Monadnock, near Dublin, it presents an entirely different aspect. Mr. Gleason’s view, page 116, shows Mt. Monadnock in a state of solitude and silence—not a sign of human habitation or animal-life disturbs the landscape, though all around the base of the mountain, not far away, are many villages and farms, also prosperous hotels and boarding-houses, for Mt. Monadnock attracts visitors in winter as well as in summer. Mr. Gleason uses this picture, with numerous other fine ones of the mountain, in his attractive lecture, “Mt. Monadnock—Beloved and Beautiful,” referred to in June *PHOTO-ERA*.

Data: Made from a point viewed due south from the mountain, about one-third of a mile from the Ark, at Jaffrey Center; September, 2 P.M.; 5×7 plate-camera; $8\frac{1}{4}$ -inch Dagor lens; stop, F/16; 3-time color screen; quick bulb-exposure; dryplate; pyro; bromide contact-print.

These last two pictures, which came to me by pure accident, shortly after the appearance of the July issue and with the first part of the "Wolfeboro Pilgrimage," serve to enhance the pictorial interest of this modest tribute to the scenic attractions of the Granite State.

One of the most remarkable photographs of its kind is shown on page 122. It is not unusual for fish or cheese at a certain stage of decomposition to be highly phosphorescent. In warm weather this is particularly the case. In the present instance, the cheeses, stored in a perfectly dark cellar of the cheese-factory on the experimental farm of West Virginia University, Wardensville, W. Va., gave out sufficient phosphorescent light to enable one to read large headlines in a newspaper. No daylight nor artificial light, whatsoever, was used in making the exposure—only the light given out by the cheeses. Data: July; dark cellar; only window (36 x 15 inches) covered with heavy, brown wrapping paper; 5 x 7 (No. 10) Premeo Camera; Zeiss Anastigmat F/6.3; at F/16; seven (7) minutes; dryplate; hydro-metol; Velox contact-print.

Pinhole-photography—photographing without a lens—is always interesting, and doubly so when explained and illustrated by so successful an artist as William S. Davis. His pictures, distributed among pages 126 to 131, demonstrate convincingly the adaptability of this method to such work as landscape-photography. Data:

"A Woodland-Pond." Near noon on bright June day; 15 seconds; with aperture nine inches from 5 x 7 Eastman Extra Rapid plate; print $4\frac{1}{2}$ x 6.

"Willows in the Mist." Made on foggy day in June; 11.40 A.M.; 60 seconds; aperture six inches from $3\frac{1}{4}$ x $4\frac{1}{2}$ Cramer Inst. Iso.; strong east wind caused extra amount of diffusion in the upper foliage of the trees which is not due to the quality of the pin-hole image.

"A Wooded Vista." Early April; 2.50 P.M.; good sun, but most of subject in shadow; 4 minutes; aperture seven inches from 4 x 5 Wellington Anti-Screen plate; print from section 3 x $4\frac{1}{4}$.

"Forest-Tones." May, 3.40 P.M.; hazy sunshine; 2 minutes; aperture ten inches from 4 x 5 Inst. Iso. backed.

"Sunshine and Shade." June; 1.15 P.M.; good sun, but contrast great, due to deep shadows; 60 seconds; aperture six inches from 5 x 7 Cramer Inst. Iso.; print from a section about $3\frac{1}{2}$ x 6 inches; this proved to be somewhat under-timed, considering the strong contrast to be overcome.

By comparing Mr. Davis' pin-hole pictures, in this issue, with those made by E. L. Harrison that appeared in these pages some time ago, the reader will find considerable difference in sharpness of definition. This seems to depend on the purpose for which pin-hole photographs are made, and which is made clear by each of these two writers on the use of the pin-hole camera. In photographing architectural subjects, as was illustrated by Mr. Harrison, a professional architect, and by Mr. Davis in his picture of a church, page 131, clearness of detail is desirable, but it may be dispensed with in landscapes and cloud-effects.

That Mrs. Cones has imbibed copiously at the fountain of artistic knowledge is evident from a study of her photographs. Based on the oval form of design, the delightful home-scene, page 134, expresses the idea of concentrated interest in no doubtful manner. What the artist may term a "gem," is in reality a masterpiece, and one which even the famous genre-painter, Meyer von Bremen, could scarcely have surpassed in interest and charm. Data: October, 1911; 3 P.M.; good light; 5 x 7 Seneca camera; 8-inch, series II, Cooke-

lens; at stop, F/8; 3 seconds; Seed 26x; hydro-metol; Salon print, a gum; print for reproduction on Azo D.

"Adorable!" exclaimed my better half as she happened to glance at the picture of the little cherub paddling in the water (page 137), while I was about to pen my commendation. "You've said it!" was my reply. The play of sunlight on "Chubbies'" adorable form, with the resultant lower tones, gives an admirable plastic effect, and the receding background of sandy beach still further increases the relief of the little figure, and makes it fairly stand out above the flat surface of the page. It is only after a long enjoyment of this captivating scene, that the critical faculty of the beholder is alive to the fact that the subject occupies the exact center of the picture-space! True; but as it is not certain whether the tiny human "quadruped" is moving forward or backward, I shall withhold my verdict, for the present.

Data: Chicago Beach; June 13, 1921; 4 P.M.; strong sunlight; $3\frac{1}{4}$ x $4\frac{1}{4}$ Revolving-Back Auto Graflex; $7\frac{1}{2}$ -inch B. & L. Tessar Ic, F/4.5; stop, F/5.6; Premeo Film-Pack; Eastman tank-development, enl. on B. M. C. Bromide No. 2.

"Segovia!" exclaims the traveler in Spain, but the artist declares that this ancient aqueduct (page 138) is near Genoa, Italy, the other and not dissimilar one having two tiers of arches. The print was awarded Honorable Mention in our architectural competition, of 1920. The picture fills the space admirably and is in Mr. Dyar's best vein. Data: March, 10 A.M.; good light; 4 x 5 Korona camera; 6-inch Goerz Dagor; at U. S. 8; 1/25 second; Premeo Film-Pack; Nepera developer; enlarged on Artura Iris.

Advanced Workers' Competition

"RATHER a quiet sport!" I seem to hear a reader remark, as he beholds Dr. Smart's lone fisherman, page 141. True, no energy, no action—no catch, but anticipation, vigilance and hope mark the activity of the young sportsman. The setting of the picture is attractive, and the tonal beauty of the original print aided in its appeal to the jury. Nevertheless, there are obvious faults, the chief one being the sudden change from a clearly defined foreground to an indistinct background. If this effect is intentional, it is not good art nor good photography.

Data: Made in W. Va.; August, 11 A.M.; hazy sunlight; 3A Graflex (postcard); 7-inch B. & L. Zeiss Tessar Ic; stop, F/4.5; 1/75 second; Eastman N. C. film; metol-hydro; 8 x 10 enl. with 7-inch Goerz Dagor lens on Artura Carbon Black.

F. W. G. Moebus deserves credit for his well-ordered design, page 142. It is graceful and well-balanced, and excels in good tonal values. The sense of rapid motion is well expressed, and faults, if any, will be hard to find.

Energetic action is the keynote of Kenneth D. Smith's "The Serve," page 143. Being a high-speed subject, with the sharpest focus on the player, there are such common faults as absence of planes, objectionable highlights and circles of confusion. The position of the server is typical and difficult to photograph; but it naturally lacks that happy adjustment of body and limbs that occasionally breaks the monotony of a long series of strained, grotesque motions of the player in his eagerness to make a telling stroke. "Take it as you can," is good enough advice if merely arrested motion is the photographer's principal aim. Better things, and with restful settings, too, by Mr. Smith, have appeared in this department.

(Continued on page 158)



ON THE GROUNDGLASS

WILFRED A. FRENCH



Comparative Merits of Amateur and Professional

No one appreciates humor more than I; but the attempt by many persons to be funny at the expense of our beautiful pastime—amateur-photography—does not appeal to me. I do not mind the term "fan" (abbreviated form of fanatic), which is applied to the baseball-enthusiast; but when such opprobrious terms, as "camera-crank," "camera-fiend," "camera-bug" and "camera-craze" are promiscuously applied by camerists to themselves or their hobby, I raise my hand in protest. PHOTO-ERA readers have commended my attitude against the use of these terms of self-reproach by writers in an effort to be humorous, and it has already been suggested that I supply a substitute for camera-enthusiast. Well: what's the matter with "amateur"?

Apropos of the term "amateur," I am reminded that certain mediocre work by professionals is frequently called amateurish. This is a slight upon the amateur who, as a pictorialist, pure and simple, is far ahead of the average professional. Again, when the work of an amateur is eminently artistic and impressive and, in the eyes of the beholder, leaves nothing to be desired, the work is praised by a remark such as "very good; looks as if it might have been done by a professional." Such praise is ridiculous, because even professional photographers are honest enough to declare that they, themselves, cannot do so well. Of course, we all know that, in painting, sculpture and music, amateurs but rarely equal the best of professionals in technical ability and masterly interpretation. In the field of pictorial photography, however, the amateur generally surpasses the professional. Naturally, there are professional portrait-photographers who, as a diversion, enter the field of genre, landscape and still-life, and when such men as Garo, Clark and Goldensky amuse themselves by composing a beautiful genre, landscape or still-life, they invariably produce a consummate masterpiece that will make some of the best amateur-pictorialists look green with envy.

The English boast a number of professional pictorialists, such as Mortimer, Keighley, Cadly, Park, Adams, Bennington, Cecil, Evans, whose achievements in the realm of pictorial photography are unsurpassed.

This brings me, in a somewhat roundabout way, to the other extreme, namely, the novice who lacks the initiative, ambition or ability to make headway in his chosen pastime. His work never rises above mediocrity; and when criticism is made of his work, he shrugs his shoulders and complacently remarks, "Well, what do you expect of an amateur, anyway? I'm not a professional." These foregoing remarks impel me to give Fernald's definition of the terms "amateur, connoisseur, novice, etc."

"Etymologically, the *amateur* is one who loves, the *connoisseur* one who knows. In usage, the term *amateur* is applied to one who pursues any study or art simply from the love of it; the word carries a natural implication of superficialness, though marked excellence is at times attained by amateurs. A *connoisseur* is supposed to be so thoroughly informed regarding any art or work, as to be able to criticise or select intelligently and authoritatively; there are many incompe-

tent critics, but there can not, in the true sense, be an incompetent *connoisseur*. The *amateur* practises to some extent that in regard to which he may not be well informed; the *connoisseur* is well informed in regard to that which he may not practise at all. A *novice* or *tyro* may be a professional; an *amateur* rarely ever is; the *amateur* may be skilled and experienced as the *novice* or *tyro* never is. *Dilettante*, which had originally the sense of *amateur*, has to some extent come to denote one who is superficial, pretentious and affected, whether in theory or practise."

A Profane Annotation

AN American soldier returning from the Rhine district, where he had been stationed with the American Forces of Occupation, brought home a German photo-exposure book as a curiosity. He was unable to read the contents, but remarked that the Germans were very profane in referring to their photographic activities, for on every page he noted in bold-faced type the word "hell." It is hoped that some of his acquaintances may explain to him that this is merely the German term for "bright" and refers to a condition of light.

A Strange Luncheon-Box

MASKED cameras in the form of field-glasses are no longer a novelty. There are others. While strolling across Boston Common, at noon the other day, the Editor noticed a young girl who was acting somewhat suspiciously. Having in her hand a camera that appeared to be of the reflex type, the aforesaid young woman acted as if she were about to make a picture in a surreptitious manner. For this reason, the Editor was impelled by a desire to watch proceedings—likewise, in a surreptitious manner. He walked away about one hundred feet and then suddenly retraced his steps, only to find that the supposed camerist had opened her camera, withdrawing therefrom a good-sized luncheon! It appeared to be the only contents of what was merely the outside of a reflex camera. She was soon joined by a companion who carried a similar camera; but the Editor did not wait to note "developments." They probably were the same in each case. Nevertheless, he has been wondering what was the purpose of this form of deception, and how a 4 x 5 reflex camera could be made to lend itself to the uses of a luncheon-box.

Elon

EDITOR OF PHOTO-ERA MAGAZINE:

Talking about names! I have been using Elon as a developer for papers with uniform success for a long time. I suppose that Elon is a coined trade-name for this developer. All the same, I read in a New York paper the other day, of a man named Elon Hooks, who was in the limelight in some way. How do you suppose this man came by his given name, "Elon"?

Sincerely yours,

L. M. DALY.



ANSWERS TO QUERIES



W. J. W.—**Ferricyanide reducer usually causes stains on prints,** and is generally thought unsuitable for this reason. If it must be used, it should be very dilute and not allowed to get upon the paper itself, but should be applied with a brush to the film-side of the print. "The British Journal of Photography Almanac, 1917," gives a cyanide reducer for prints on page 438, but points out that the solution is very poisonous. The formula follows:

Iodine (10 per cent sol. in potass. iodide sol.) 30 minims	6 c.c.s.
Potass. cyanide (10 per cent sol. in water) 5 minims	1 c.c.s.
Water 1 ounce	100 c.c.s.

A. C. O.—**The lens should always be parallel to the film or plate.** A camera-front that is not tight is apt to be responsible for a greater or lesser amount of distortion. Before purchasing a camera be sure to examine carefully that portion of it which holds lens and shutter. If it leans forward or backward and the right and left sides move easily, so that one part of the lens is nearer to the film than the other—do not accept the camera. A rigid front is essential to success.

W. C. K.—**Most roll-film and film-packs are warranted against deterioration from eight to twelve months.** The expiration-date is stamped plainly on every box, so that with due attention there is little danger that you may receive old film. If the film is to be used immediately it makes little difference, provided the expiration-date has not been passed.

I. B.—**The advantage claimed for the blue nitrogen-filled lamp in printing** is that the light seems to have greater actinic power than the regular mazda lamp. How much more power the nitrogen lamp has over the other is a debated question, particularly, when such lamps are used in the average small printing-machine. It is usually best to use ground-glass in the printing-machine as it diffuses the light evenly over the picture-space and also dims the filaments of the lamp so that they are not likely to make an impression on the sensitive paper. About a 60-candle-power light is sufficient for the average printing-box; but there are so many different types of lamps used to-day that in our opinion it would be better for you to call at some large photo-dealers and make a careful inspection of the various types of printing-machines now on the market. After asking all manner of questions and inspecting the machines personally, you would be in an excellent position to know what would fill your requirements.

J. H.—**With regard to a formula to make fabric fire-proof,** we give you the following from E. J. Wall's "Dictionary of Photography": prepare following: water, two ounces; sal-ammoniac, 150 grains; boracic-acid, 60 grains; borax, 30 grains. The article to be fire-proofed is boiled in this for about a quarter of an hour; wring out and dried. Another formula is: water, two ounces; alum, one dram; ammonium-phosphate, one dram; borax, two drams.

A third formula is: water, two ounces; ammonium or soda sulphate (glauber salt), one-quarter ounce; boracic-acid, 30 grains; borax, 30 grains. The first formula is probably the best.

A. W. I.—**The uneven tone in your sepia prints is possibly due not to uneven toning but to improper fixing.** If prints lie together in the fixing-bath, and are not properly separated and thoroughly fixed, the uneven action will not show up until the prints are in the toning-bath, and then irregularities of tone may occur.

I. C. V.—**The cause of blistering is very apt to be old or weak fixing-bath**—though too abrupt changes in the temperature of solutions may also be responsible. When the blisters are only slight, it is usually possible to rub them down into contact again when the print is nearly dry.

K. B. C.—**Old negative glass is quite in demand now,** and good prices will be paid by the Eastman Kodak Co. of Rochester, N.Y., or by Geo. W. Cary, 2968A Cleveland Avenue, St. Louis, Mo. Packing-directions will be sent by these concerns. The Eastman Kodak Co. also furnishes shipping-tags for the boxes. Not more than 100 pounds should be packed in one box, and all plates should face in the same direction.

F. H.—**Stereo-cameras made in the United States may be obtained from Folmer & Schwing and The Rochester Optical Co., Divisions of the Eastman Kodak Co., Rochester, N.Y.; also from Burke & James, Inc., 240 East Ontario Street, Chicago, Ill.** If you are interested in the new, small, imported Stereo-cameras, you can obtain information from Harold M. Bennett, 153 West 33d Street, C. P. Goerz American Optical Co., 317 East 34th Street, Adam Archinal, 1409 Broadway, C. G. Willoughby, Inc., 110 West 32d Street, and R. J. Fitzsimons, 75 Fifth Avenue, all of New York City. There are many excellent cameras to be had with lens- and shutter-equipments adapted to all requirements of the stereo-photography. First obtain all available descriptive matter and then decide which instrument will serve your requirements.

R. A.—**Inaccurate shutter-speeds, due to dust in pneumatic valve,** may be corrected by having the cylinders re-buffed. This work should be entrusted only to an expert. In no circumstances should oil or grease be used. Any firm of acknowledged reliability can attend to the cleaning of your shutter, and will guarantee entire satisfaction.

J. O.—**Whether tank- or tray-developing is the best depends, for a decision, on individual taste and requirements.** One camerist may find tank-developing both efficient and convenient, and another may find greater pleasure and profit in darkroom-developing. However, the fact remains that tank-developing of plates and films is no longer considered to be experimental. Amateur and professional photographers have put the stamp of their approval on tank-developing. Autochrome and Paget plates are still developed by hand in the darkroom. The developing of these plates—or any plates and films used to obtain scientific data—requires constant attention during the entire developing-process, and they cannot be developed successfully in a tank, for the reason stated. For the average amateur, who is not interested particularly in the chemistry of photography, the tank is unquestionably the most convenient and efficient method to develop vacation- and snapshot-pictures.



EVENTS OF THE MONTH

Announcements and Reports of Club and Association Meetings, Exhibitions
and Conventions are solicited for publication



The Buffalo Convention

THE thirty-ninth annual convention of the Photographers' Association of America was held at Buffalo, July 18 to 23, and ranks as one of the best in the history of the organization. Those who attended the affair were not deterred by increased traveling-expenses and hotel-rates, but were impelled by an earnest desire to increase their stock of knowledge, to renew business-acquaintances and, at the same time, to enjoy the incidental diversions. They got their money's worth. According to the secretary's figures, the total attendance reached nearly 1,500.

Knowing that the serious-minded members of the Association were to be well represented, the manufacturers and dealers planned accordingly; hence, the latest and best in photographic products and improvements was on view. About eighty industrial exhibitors were represented. Among those who advertise in PHOTO-ERA MAGAZINE were the AnSCO Company, Bausch & Lomb Optical Company, Ciba Company, Inc., G. Cramer Dry-Plate Company, Defender Photo-Supply Company, Eastman Kodak Company, C. P. Goetz American Optical Company, Graf Optical Company, Halldorson Company, Hammer Dry-Plate Company, Hanovia Chemical and Mfg. Company, Ilex Optical Company, Japanese Water-Color Company, J. L. Lewis, John G. Marshall, Sagamore Chemical Company, J. H. Smith & Sons Company, Sprague-Hathaway, and Wollensak Optical Company.

The picture-exhibits were of an unusually high order of merit. They deserved and received warm praise even from the critical overseas visitors. The program had been prepared with discriminating judgment and great liberality. Each day had its quota of practical features and musical entertainment. Although numerous, divers and valuable were the talks by eminent experts, the impromptu address by Pirie MacDonald was generally declared the outstanding feature of the convention. For spectacular impressiveness, nothing ever equaled the illumination by immense searchlights of Niagara Falls on the evening of July 21!

Though Kansas City was proposed by some as the next (1922) convention-city, this question will be determined by the executive committee.

The complete report of the doings, addresses, etc., at the convention will be published in the form of an annual as has been the custom in years past. It will be a handsome volume and contain a complete list of members, halftone reproductions of some of the best pictures exhibited at the convention, advertisements of manufacturers represented there, and other items of interest.

The incoming board, elected at the convention, consists of the following officers: president, G. L. Hostetter, of Des Moines, Ia.; first vice-president, A. H. Diehl, of Sewickley, Pa.; second vice-president, Clarence Stearns, of Rochester, Minn.; third vice-president, Blanche Reineke, of Kansas City, Mo.; treasurer, J. E. Mock, of Rochester, N.Y. Chairman of the Commercial Section, with a seat on the board, Howard Webster, of Chicago; representative of the manufacturers, also of the board, J. K. Harriman of the A. M. Collins Mfg. Co., of Philadelphia.

Notable Exhibits at Newark Camera Club

WITH commendable enterprise the executive committee of the Newark Camera Club has arranged for a series of interesting one-man exhibitions at the club. The schedule, prepared by chairman Louis F. Bucher, is as follows: September, Holmes I. Mettee, Baltimore; October, James Wallace Pondelicek, Chicago; November, Rabinovitch, New York; December, T. O. Sheckell, Salt Lake City; January, Paul L. Anderson, East Orange; February, C. H. Davis, Hoboken; March, John H. Stick, Los Angeles. Other eminent photopictorialists, whose work will be shown at the club, are Bertrand H. Wentworth, Gardiner, Me.; Rupert S. Lovejoy, Portland, Me.; Edward R. Dickson, Karl Tausig and Kate Smith, of New York.

Floyd Vail's Exhibition at Brooklyn, N.Y.

THERE will be at the Photographic Section of the Brooklyn Institute of Arts and Sciences, Brooklyn, N.Y., November next, a one-man show, consisting of fifty pictures by Floyd Vail, of the Camera Club, New York. As Mr. Vail is a pictorial-photographer of wide experience and of successful activity, whose pictures have been shown at exhibitions in this country and abroad, it is fair to assume that his forthcoming show, in Brooklyn, will be one of unusual interest.

Kinema "Stills"

How harsh and crude are most of the photographs exhibited outside "picture-palaces," and technically known as "stills." They are usually biting sharp black-and-white prints on highly glazed paper, remarks *The Amateur Photographer*, and they reveal every detail of make-up, good, bad, or indifferent; and whereas, to a certain extent, they may illustrate some incidents of the play, they fail dismally from a pictorial point of view, or to suggest the action that the incident involves. This is largely due to the method of their production. We understand that in most places where picture-plays are produced, the photographer with a view-camera proceeds to make exposures of reconstructed groupings after the film itself has been made. This will account for the strained and wooden poses; but it does not excuse the harshness of the results. The motion-picture as seen by the eye does not in any way resemble such photographs; and a sympathetic rendering by a capable worker, introducing, where required, a slight softening of the image, would give far more pleasing results and a better idea of the film, attract more attention, and would present an altogether higher kind of photography to the public. The first step would be for the photographer to make his negatives with, preferably, a reflex camera during the actual progress of the action. This will give him finer and more natural grouping, as well as a greater choice among a variety of incidents; and the light will be ample to allow him to make instantaneous exposures from a standpoint approximately the same as that of the kinematograph camera itself.

Unreliable Photography

JUSTICE GOFF of New York made a very sensible decision the other day when he refused to accept a photograph as valid evidence in a divorce-case. Time was when that kind of evidence was admitted and held good. But the way in which plates and films can be juggled and altered without detection has made photography very unreliable in court. We have only to look at a few of the marvelous stunts in the "movies" to recognise the reason. As Justice Goff sagely puts it, "the inherent infirmity of such testimony is apparent when the protean character of the art of photography is considered."—*New York Herald*.

The Springfield Convention

THE New England photographers will open their twenty-third annual convention at Springfield (Mass.), September 6, Tuesday evening, at 7.30 o'clock, for an informal get-together meeting, with music and entertainment.

This will be followed by a three-day convention. DON'T MISS THIS, PLEASE!

The Keynote-note of this convention will be, "Better Pictures—More Business—Good Fellowship."

The officers and members of the Association have given much serious thought and effort to the coming convention, keenly realising the need of closer co-operation by the professional photographer for the promotion of his own business and the protection of his patrons.

The program that has been planned is one that no photographer can afford to miss, for it includes a discussion of the new proposed tax on photographs, its explanation, and every member present will have an equal opportunity to decide by whom it shall be handled. Every New England photographer is earnestly requested to attend and take an active part in what concerns him most, namely, his own profession, his success, his prosperity.

As the complete program cannot be stated, at this moment, here are a few of the highlights:

Demonstrations in negative-making by some of the ablest and best-known portrait-photographers in the country, one of whom will be Mr. Garo, of Boston. During these demonstrations, there will be an opportunity for attending members to have negatives made of themselves.

Mr. Charles Bushong, assisted by Mr. Shepardson, will demonstrate how motion-pictures can be made in the studio of the professional photographer or in the homes of his patrons.

A unique and interesting feature will be a demonstration by a well-known photographer of what can be done with a 400-watt lamp in producing fine portraits.

There will be not only a large collection of photographs by our own members, but exhibits by many of the leading photographers outside of New England, and the finest show of foreign photographers ever seen at a photographers' convention in this country.

There will be a lecture by an eminent authority on "What to avoid in making portraits."

The manufacturers and dealers will be on hand in full force, and with all that is new and up-to-date in photographic apparatus and equipment. These exhibits will occupy separate booths specially constructed for this convention, and occupy the entire floor-space of the Auditorium.

The clam-bake will be one of the principal entertainments, and means a good time for everybody.

President A. K. Peterson has devoted much thought,

time and energy in planning a pleasing and successful program, and has received able and cheerful assistance from many sources.

President Harding

THERE never was a time in the history of this country when the President was confronted by so many domestic problems as at the present time, to grasp and to settle which, to the best interests of the nation and the American people, calls for the highest sort of patriotism and statesmanship. Fortunately, these important qualifications are a part of President Harding's equipment; but to enable the nation's chief executive to meet the American people's needs and hopes, we must, every man and woman of us, give him every ounce of our support, encouragement and goodwill.

We quote, below, an admirable editorial, from *Collier's Weekly*, on this subject.

"Collier's is not partisan in politics, but in men. The time has come to say that we think well of the showing that President Harding thus far has made. Let us say that Mr. Harding has delivered in the first five months of his administration more of courage in doing what he believed to be the right things for the good of the country, and more of common sense and acumen in the process of arriving at those beliefs than he sold to the country in his campaign. He will not object, as men of an earlier day might have objected, to the verb sell in this personal application. It is super-salesmanship to sell just a little less than you expect to deliver, whether it be barrel staves or statesmanship.

Mr. Harding sold himself to the country as an average man. To date he has delivered himself as more than an average man. Strip him of his conventional trappings (which, incidentally, led many of us to underrate him), and you find revealed a man of sincerity, moderation and force, who knows, or has the means of determining, why and how he is going to do his job. He has more than three years and a half to complete delivery of goods on his presidential contract, and there is every reason to foresee that he will follow through and finish as well as he has begun."

An Idea for Increasing Business

IN traveling around and calling on studios and amateur finishers, I see many different schemes and attempts in advertising. But I am going to tell you of one of the best schemes that I have seen so far.

In a certain medium-sized city, two young fellows started in the photo-finishing business. They had a store just off the main street. At first they simply put out the usual sign, "Kodak-Finishing"—and had the usual display of prints and enlargements in the window and—as competition was keen—they did only the usual business. They decided that they would have to do something different in order to get business.

So they invested a few hundred dollars in a ——— dryer and a washer and, instead of hiding them out back in the darkroom, they put the dryer right down in the front of the store—three feet from the store-window. And they placed the washer right back of it at the left, so that it could easily be seen from the street. They also had the trimming- and assorting-counters in the front. For two months, there was always a curious crowd watching this apparatus while it was in use.

This same store now has seven employees instead of only the two original owners. They are now doing the unusual business. They do their printing in the

back, and the washing and finishing in front. They claim that their investment in apparatus has more than come back in the advertising alone that they received from it. This is just a suggestion for photo-finishers for amateurs.—*Salesman.*

The Camera Club, New York

WE are sure that our readers will be interested to learn that the annual exhibition of members' work of the Camera Club, 121 West 68th Street, New York, will be held during the month of September. The public is cordially invited, free of charge. As this camera club includes the names of many of the foremost workers in the United States, this exhibition should be unusually attractive and instructive.

A Word to Our Advertisers

WE are sure that advertisers will be glad to co-operate with us to our mutual advantage. The point is, we are eager to improve our service and to meet the wishes of our patrons in every way possible. However, we need a reasonable amount of time to do so. When advertising-copy reaches us late in the month, it delays the publication of the magazine and thus occasions a loss of valuable time for all concerned. To serve our advertisers to better advantage, we request that all advertising-copy be sent us so that it will reach our publication office in Wolfeboro, New Hampshire, not later than the 5th of the month preceding the date of issue. The co-operation of our advertisers in this matter will be very much appreciated.

A. H. BEARDSLEY, *Publisher.*

Cameras for Press-Work

A WRITER in *The Amateur Photographer* calls attention to several interesting facts with regard to cameras for press-photography. Any one who sees a number of press-photographers at work recording some event cannot fail to notice that almost every one is using a camera of the collapsible focal-plane type, fitted with a direct vision-finder; and a natural conclusion from this is that any amateur photographer who thinks of adding to his income, or at least of reducing the costliness of his hobby, by selling prints to the newspapers, should be equipped with this kind of instrument. The conclusion is quite correct, if the pictures which he hopes to sell are to be of this class, and if he does not care to be burdened with a reflex. If he is prepared to face its unavoidable weight and bulk, the reflex will do all that the other will do, and a great deal more; and will be especially useful, if he is the possessor of a long-focus or telephoto-lens, which is virtually unusable on the collapsible focal-plane pattern. But the recording of events is now done so thoroughly by the newspapers themselves, or by press-agencies, that there is comparatively little scope in that direction for the amateur; but there is still a very large and growing field for the sale to newspapers and magazines of prints of other subjects, such subjects as are well within the range of other types of camera. Hence there is no need for any photographer to feel that he is not able to take up photography for the press unless he has an outfit of the kind which experience has shown to be best for what may be called photographic reporting. Later on, he may find that he can use such a camera profitably.

Our Illustrations

(Continued from page 153)

Data: Made in Hanover, N.H.; May, 1920; R. B. Graflex $3\frac{1}{4} \times 4\frac{1}{4}$; B. & L. Ic Zeiss Tessar lens; used at F/4.5; 1/680 second; Cramer Inst. Iso Double-coated; pyro. in tank; enl. on Artura Carbon Black, rough mat.

Beginners' Competition

"GUARDIANS of the Field," page 147, is a picture of much poetic feeling and artistic merit. The cloud-filled sky relieves threatened monotony, but scarcely saves the day where the landscape is in deep gloom. The fact that the landscape represents but one plane appears to be due to underexposure or to overprinting.

Data: R. R. Lens fitted to a 3A Seneca Camera; Eastman roll-film; Eastman special developer; print on Eastman Bromide; toned with B. & W. Tabloid Toner.

Arthur Gillam's "Curious," page 148, is a record, pure and simple. It illustrates the common fault of concentrating the focus upon the main point of interest and leaving the rest to its fate, and such a sad one! The background presents a frightful spectacle—distorted foliage caused by innumerable circles of confusion. This distracting result could have been avoided had the camerist used a little smaller lens-stop, focused on the hood of the carriage—"dividing the focus"—and given a less quick exposure. Result—possibly softer definition of the baby and the carriage, a less indistinct background, no disturbing round, white spots, less contrast and a generally softer effect.

Data: June 14, 1921; 3 P.M.; strong sunlight, but made in shade of a tree; Ica Ideal B Camera; Zeiss Ili; F/6.3 lens used at full opening; picture focused on groundglass; 1/25 second; Standard Orthonon plate; 9 x 12 cm.; Elon-Hydro; daylight-print on Azo No. 2 F; Elon-Hydro. Picture made two months after purchase of his first camera.

Example of Interpretation

As an example of happily presenting a familiar architectural subject, PHOTO-ERA offers Carl Kattelmann's admirable portrayal of Mount Vernon—an American Shrine, page 144.

Data: August, 1 P.M.; bright sun; 5 x 7 Premo camera; $6\frac{1}{2}$ -inch Kodak Anastigmat; stop, F/16; three-time color-screen; 1 second; Standard Ortho. plate; pyro. tank; contact-print on Azo A. Hard.

Our Contributing Critics

A. S. WORKMAN, an occasional and worthy contributor, has joined the ranks of "wise birds" who offer one of their pictures for helpful criticism, and, at the same time, enjoy the differing comments by friendly camerists some of whom may not be able to excel the pictures they are criticising.



Obedied the Label

"WHAT did the critics say about Fretwell's new picture entitled 'Pan'?"

"They panned it."—Exchange.



LONDON LETTER

CARINE AND WILL CADBY



WE have received recently from the Imperial Dry-Plate Co. some of their new Eclipse plates. These have been on the market a very short time; and, for the present, are the last word in speed,—750 H & D.

This matter of speed is so important and far reaching, that it may be worth while to consider what these new, fast plates can do beyond what was possible before their advent. Up to now, we have always used for children's portraits, in our white Studio-room, Flashlight plates (500 H & D) which gave full exposure at F/6.8 on days of normal light between 11 and 1 o'clock with the fastest bulb-exposure it was possible to give.

Now, with half as much speed added—as is the case with the Eclipse plates—we obtain advantages that might be used in various ways, which, if we take our own white-room portrait-work as an example, we soon realise. For instance, we might devote it to getting greater depth of focus—often necessary where a group of several children is being made—and, yet, be able to keep to the same short bulb-exposure. Or we might, in the case of restive sitters, turn our bulb-exposure into a slow instantaneous, let us say one-twentieth of a second, and still work at F/6.8. We could also, with this extra speed at our disposal, prolong our portrait-making hours, besides being able to work on dull days with a reasonable hope of sufficient exposure.

But now that there has been a forward movement in the speed of plates after so long a lull, where is it to end? If the makers can get the speed up to 750, is there any reason why it should not eventually reach 1,000? Personally, we should be fearful of using these plates for anything but indoor-portraiture, for the dangers of overexposure must be very real, unless the fact of their extreme rapidity has been fully grasped. In developing, the makers recommend a very deep ruby light (the Imperial Ruby Safelight No. 4) and even then they do not advise exposing the plates overmuch to the rays of this modified darkroom-lamp. The tray should be kept covered, and examination by transmitted light avoided as much as possible. Development seems to offer no difficulties, especially if one or other of the formulae recommended by the makers is used. There is a pyro and a metal formula, the former for vigorous, the latter for soft negatives.

The drought, from which we have suffered for the last two months, is so unusual a state of the weather for this country, that we hope it will not recur. There has been every opportunity for the faithful recording by the camera of the various sport-events from international polo to the innumerable lawn-tennis contests; for the sun has shone almost uninterruptedly, and never have the papers been so filled with pictures of games. News-photographs, made from air-planes, are steadily on the increase, and a splendid view of Henley Regatta was obtained from the air. But there are some photographic drawbacks in this long, dry spell. It has increased the dust enormously and it finds its way into all parts of the apparatus, especially on motor-expeditions, when cameras cannot be too carefully looked after. The extreme dryness, too, is inclined to affect wooden cameras, and one is conscious of plateholders working with dangerous facility.

But the fine, sunny weather has had a marked effect on holidays, and they are certainly in full swing much earlier than usual this year.

Do all photographers make notes of their exposures when they are away from home? We are afraid not; but although it is somewhat of an effort until the habit is formed, it is well worth while. We have found this summer that notes of last year's photographs are particularly useful. They have so far enabled us to do away altogether with light-testing. We have been working in about the same surroundings as last year; that is, among mountains, at an elevation from 3,000 to 6,000 feet above the sea, and we have been amazed how well our old notes apply to this new district. Naturally, if used in this way, one must give more details than just the hour, stop, exposure etc., if the greatest amount of help is to be got from one's notes. For instance, if there is a dark foreground, or a particularly dazzling distance; or if we are facing the sun, such items are carefully noted as having an important bearing on exposure.

And while on the subject of mountain-photography we might mention that most useful bit of apparatus, the graduated filter made by Messrs. Sanger, Shepherd and Co. Like an ordinary color-screen, it cannot be used uniformly for every exposure; for it is only where one part of the picture needs less exposure than the rest, that it is of advantage. But for subjects that often have dark, green pastures in the foreground, mountains in the middle distance, and snow-covered peaks on the horizon, the graduated screen is invaluable, for it gives the glittering snow-mountains just a fifth of the exposure it allows to the foreground. The screen is easily moved up and down in its setting, so that more or less of the picture, as desired, can be brought under its influence. As the yellow screen is very finely graduated till it becomes clear glass, there is no fear of an edge showing across the picture. So useful have we found the arrangement, that this year we have had it fitted to a $2\frac{1}{2} \times 3\frac{1}{2}$ inch N. & G. camera as well as to the half-plate apparatus with which we encumber ourselves on our journeys.

The amateur is often criticised for not bringing home more photographic successes; but we are beginning to think that there is a good deal of excuse for him. We have been staying in one place (in Switzerland) for a week. It is a sort of junction in the mountains, where several little railways meet that link up many beauty spots. Its name is Lauterbrunnen. There is a deep, dark gorge with very high cliffs down which a feathery waterfall (Trümmelbach) gently finds its way. Above, towards the east, tower some of Switzerland's most lofty, snow-clad mountain-peaks. It is a wonderful, but difficult view, seen a mile away from the village. But it needs an early morning lighting with sunshine. Here, then, come pilgrims. They arrive mostly at midday, have luncheon and are off again to higher places. But before leaving, they all make snapshots, little dreaming that they have not obtained, by a very long way, the perfect beauty and spirit of the place. As stated, we have been here a week and only once have all conditions been satisfactory for photography. This is often the case elsewhere.

Something New About Eyes

SCIENTISTS, poets, speakers, and teachers of oratory are all interested in the tests which are to be applied to Dr. Charles Russ's reported discovery of "a motive power in the eye," says the *Boston Herald*. Accept it as a fact, and it resuscitates another of the ancient beliefs that were discarded centuries ago. When savages were found to have mysterious ways of communicating with each other at a distance, it was called "superstition" or plain "fraud"; we moderns investigate the art with the aid of learned scientific societies and name it "telepathy." Alchemy, as a means of converting the baser metals into gold, was long regarded as a delusion of the dark ages; today the chemists and electricians, in some of their experiments, are working in the firm expectation that some day the "transmutation of metals" will be an accomplished fact. Leibnitz and the thinkers of his age were criticised for hinting at an underworld of awareness in the mind of man; in our time the realm of the "subconscious" has come to play a large part in the science of psycho-therapeutics. The ancient explanation of seeing was that the eye did not passively receive the light-rays, but in some way projected its own power outward to the things seen.

Dr. Russ, who is an eminent British bacteriologist, now turns us back in a new way to this old belief. He seems to have got his cue from "the discomfort produced by being stared at"; he also had before him the fact "that a puppy, if held and gazed at in the eyes, becomes frantic to get away from the discomfort," and the further fact that "certain types of snake hold their prey in a dazed state by the gaze of their eyes." Proceeding to experiment, he devised a delicate instrument containing an indicator and furnished with a sighting slit. "When the eye is brought near the slit, the indicator flies off into motion; by casting the eye from side to side, the indicator can be driven in one direction or another." The gaze of the eye, that is to say, gives the indicator a push, showing that a force of some kind travels out from the eyeballs to the objects on which the glance rests. At any rate, that is the story. And if Dr. Russ can succeed in making good with his apparatus the effects produced by Browning's "steady stare" and Coleridge's "glittering eye" will be lucidly explained; we shall know why Milton could write of "ladies whose bright eyes rain influence," and we shall appreciate all the better, Pope's satire on the peripatetic critics he disliked:

"Fire in each eye, and papers in each hand,
They rave, recite and madden round the land."

The Petzval Lens

PETZVAL is the name of a lens-system invented by Joseph Petzval, a famous Austrian mathematician, an account of whose life and work was published editorially in PHOTO-ERA a number of years ago. This Petzval-lens or objective was made for portraiture, exclusively, and consists of two lens-combinations—the front one, a double-convex crown cemented to a double-concave flint, and the rear a concavo-convex and a double-convex lens of crown separated, slightly, by a metal-ring. This portrait-lens was made commercially in 1841 by Friedrich Voigtländer, a skillful optician of Vienna, who later moved his optical works to Braunschweig, Germany. As this lens or objective won immediate popularity, it was constructed by Voigtländer

in about a dozen sizes—from one-quarter sized plate to one of 20 x 24, and even larger. The Petzval objective has served as the model for the finest portrait-lenses that have ever been made, including those of the present day. The Dallmeyer portrait-lens was constructed on the same principle, also those made by A. Darlot, of Paris. These portrait-lenses, although large in calibre, are still in great demand, and second-hand ones, when in good order, often bring even higher prices than the original retail-price. As a matter of fact, they have not been surpassed for the use of portraiture, although the Anastigmat represents virtually the most perfect lens, from an optical viewpoint, and is not so well adapted to portraiture as a portrait-lens constructed on the Petzval-system. The front-combination, removed and mounted in a suitable tube, is highly prized by photo-pictorialists for landscape-work.

Fine-Art Essentials

THAT the work of the portrait-photographer should be based at the very least on a lively appreciation of what is fine art, is a dictum which every studious professional portraitist at once admits, and in the same breath lamenting that art entered in very small measure into the training which he or she received. Unfortunately, says *The British Journal*, the opportunities, such as they are, for students to acquire a living knowledge of art-principles, present themselves only to those who undertake a systematic course of training in the technique of one or other of the manual graphic arts, such as painting and drawing; and even to them the good fortune does not invariably come of having a teacher able to lead them in the different, though cognate, paths of art and technique. Thus, in photography especially, it happens that training in art is often a work of self-education undertaken after a certain technical competency has been achieved. It is, therefore, in accordance with the realities of his situation that the ambitious portrait-photographer should seek aid in his own artistic development wherever he can find it. And it is this gift of perception which more than any other is needed to redeem photographic portraiture from the lack of character with which so largely it may be fairly charged. It is obvious that in the absence of a correct or sharp recognition of what is good in art, there cannot be the progress in portraiture which, technically, is within the reach of photographers.

What is a Journalist?

THE finest, best and truest definition of a journalist is to say that he is a man with a message—it may be a number of messages—the purpose of which is to better his fellow-men. The public good rather than private gain is the incentive that stirs him to action. His efforts may be centered on big, notable issues that attract the public's attention or he may direct his good influence in a thousand inconspicuous ways. The whole matter is that he is a preacher, an evangelist, a reformer, who speaks his message through the multitudinous tongues of type.

That in many instances he is not a money maker and saver ought not to stand to his everlasting discredit and injury. He ought to be a fearless writer and one who would not shape his sentences with the thought of how much they would mean to him in dollars and cents. He should defend right issues no matter how unpopular or unprofitable.—*Boston Herald*.

Do not stand up at once!



RECENT PHOTO-PATENTS

Reported by NORMAN T. WHITAKER



THE following patents are reported exclusively for PHOTO-ERA MAGAZINE from the law-offices of Norman T. Whitaker, Whitaker Building, Washington, D.C., from whom copies of any one of the patents can be obtained by sending twenty-five cents in stamps. The patents mentioned below were issued from the United States Patent-Office during the month of July.

Patent, Number 1,383,305. Photographic Exposure Mechanism. David M. Hurlburt, of Rochester, New York, assignor to Eastman Kodak Company, of Rochester, N.Y.

William F. Folmer. Photographic Exposing Apparatus, patent, Number 1,383,395, assigned to Eastman Kodak Company, of Rochester, N.Y.

Panchromatic Sensitising Composition. William Friese Greene of London, England. Patent, Number 1,383,620.

Patent, Number 1,383,733. Film-Developing Rack. Nahum Ellen Luboshez of London, England, assigned to Eastman Kodak Company of Rochester, N.Y.

Isidor Kitsee of Philadelphia, Pa. Producing Matrices and Color-Screens. Patent, Number 1,383,819.

William D. Wood of Seattle, Wash. Patent, Number 1,384,372, Photographic-Printing Machine.

Patent, Number 1,382,272. Sensitometer for Testing with accuracy the Speed, Latitude, and Color Sensitivity of Photographic Plates and Films. Raymond Davis, of Washington, D.C.

Over Three Years Between Exposure and Development

QUESTIONS are often put to me on the subject of keeping plates between exposure and development; and it is my practice to recommend developing as soon after exposure as may be convenient; because until a plate has been developed and fixed it is, of course, always subject to the risk that it may be accidentally exposed to light, or may suffer from improper storage. But when these risks can be eliminated or ignored, it is remarkable how long a good commercial plate may be kept after exposure and before development, as is well shown by a recent experience of my own.

Whitsuntide, 1918, found me in a very pleasant country town in Gloucestershire, without a camera; and, finding time hang on my hands, I hired a 3½(x5½) view-outfit, from the local chemist, bought a box of Imperial Special Rapids, and made a few exposures. Most of these were promptly developed; but a couple of the plates, exposed in a meadow on subjects in which cow-parsley figured very alluringly, were repacked and lost sight of. The exposures were made on the Bank Holiday, which reference to the almanac shows fell on May 20, 1918; and on June 11, 1921—over three years afterwards—I found at the back of a drawer the box that contained those two plates. As no particular care had been taken of them, I was prepared to find that they had deteriorated hopelessly. On opening the plate-box in the darkroom, it appeared that they had simply been placed film to film, wrapped in the thin brown paper originally used by the makers, and slipped into the plate-box. The box itself had not been wrapped up in any way—merely left in a drawer at the mercy of the curiosity of any one that opened it.

However, I determined to develop them; and for that purpose used an ordinary developer without bromide, such as I should have used if the exposures had only been made an hour or two previously. To my surprise, I must confess, development was normal in every way. There was no indication either during development or in the finished negatives that they were at all out of the ordinary: the edges are perfectly clean, and there is none of that metallic iridescence which one usually associates with old plates. Nor is there any suggestion of a fading-out of the latent image, which might have led to the appearance of underexposure. In fact, the negatives are in every way what I believe they would have been if they had been developed in June, 1918, instead of in June, 1921.

There is nothing remarkable in the successful development of a negative three years after the plate was exposed. It has, I believe, been recorded many times; and experiments have been conducted which were spread over a number of years, in which a number of plates have been exposed simultaneously, and one of them developed after the lapse of each year. What is remarkable is, first, that there is no sign of deterioration at all, and secondly, that this is so in spite of the absence of any of the precautions which one might think of taking, were such an interval before development to be intended.

The results here described at least testify to the excellence of Imperial Special Rapid plates, if this tried product needed any such testimony, and also to the suitability of the packing materials in which they are sent out. That the box should not have been exposed to any deleterious fumes is merely accidental: if it had been, the mere cardboard-box and a single thickness of brown paper would hardly have afforded sufficient protection; and however good the plates may have been originally, they would have been manifestly the worse for being improperly kept.

R. C. B., in *The British Journal*.



Panchromatic Plate Safelight for Electric Darkroom Flash-Lamp

PROCURE green celluloid, such as used in bookkeepers' eye-shields. Color should be metallic blue-green like railroad switch lamp, with slightly more blue than green showing when viewed by transmitted light. Use at least two pieces of this celluloid, cut circular in form, and interpose a piece of exposed and developed film grayed to the density of the average 1/25 second sky-film. This light is quite safe enough to look at a panchromatic plate for half a minute, provided it does not strike the plate directly, but the wall behind the tray or some cardboard back of tray. If this green-blue searchlight is turned upon a wall five or more feet away from the plate the interposed film may be omitted. The rays should not strike the plate directly, although 5 seconds or so of direct light about 15 inches away will do no harm.

H. KROENING.



WITH THE TRADE



This is No Time for Discouragement

WITHIN the past few weeks two letters have reached my desk, one from a dealer and the other from a manufacturer, to the effect that each was fighting hard against existing conditions. These letters breathed a spirit of mingled courage and despair that was bewildering. To be sure, neither had hoisted the flag of surrender; but one of them was perilously near to it.

In this connection I am reminded of the story told of an elderly lady who said, "All my life I have worried about things that never happened." It seems to me—and I am a good "worrier" myself—that this is a time to realise the truth that lies in this old lady's remark. The fact is, under the guise of being prepared, we anticipate difficulties which never occur. Instead of "preparing" ourselves for the good things ahead we deliberately assume that the future—dark and mysterious—can harbor only one thing—trouble.

Photographic dealers and manufacturers have had hard times, and conditions are still somewhat precarious in some quarters; but, really, are not things better now than they were six months ago? Those who have fought the advancing phalanxes of discouragement with the battle-cry of "They Shall Not Pass!" are obtaining their first glimpse of a new and prosperous business-period.

There is one outstanding fact that binds us all to fight on with heads up and fresh courage. It matters little whether it be a manufacturer, dealer, amateur or professional photographer or an editor of a photographic magazine. The entire question that faces us is whether or not we shall permit interest in photography to lag for a moment. What would happen if the public at large should turn from photography to some other pastime or profession? This is the very moment to see to it that the ranks of our photographic army are recruited and not depleted through desertions and discouragement. I believe that we cannot be far from the peak of our difficulties and that now is the time for every manufacturer, dealer, amateur and professional photographer to take fresh courage and put photography over the top in an overwhelming, permanent victory.

PHOTO-ERA MAGAZINE is trying hard to do its share toward making photography fully appreciated by the general public. Also, it strives to help and encourage amateur and professional photographers to do better work, that they and photography may grow artistically and scientifically. In this campaign the photographic manufacturers and dealers are a most important factor; for without them the growth of photography would be well-nigh impossible. None of us can afford one moment of discouragement. Just one more united, courageous offensive and we shall all enjoy a well-earned victory.

A. H. B.

Autochromes in Advertising

A MOST interesting and deservedly successful new departure has recently been made in bringing many of the chief French luxury trades to the notice of the general public, says Mr. L. P. Clerc in *The British Jour-*

nal. This has been done by means of the Autochrome process, which, in serving the purposes of advertisement, has itself obtained considerable *réclame*. The "Salon of French Taste," which opened last month in the Palais de Glace, Champs Élysées, Paris, contains more than 1,800 Autochromes of all sizes, from 5 x 7 inches to 7 x 16 inches,—the largest size made,—representing jewellery, glass and pottery ware, enamels, bookbinding, tapestries, furniture, lighting-accessories, and all articles of dress and toilet, and even carriage-work. These Autochromes, in company with a number of colored transparencies from 10 x 14 to 20 x 24 inches, are mounted in frames and are illuminated by concealed electric lamps. The color-reproductions of the goods of each of two hundred and fifty exhibitors occupy a separate panel, and these panels are systematically arranged in twelve alcoves erected in the rotunda of the Palais de Glace. The conception and organisation of the whole exhibit have been perfectly carried out in all respects, and reflect the greatest credit upon its designer, M. Devries, and equally upon the makers of the Autochromes, MM. Desboutsins and Venturol. The exhibition has been a revelation of color-photography and the Autochrome process to the public unfamiliar with photography; and the reviews in the newspapers have shown a widespread ignorance, on the part of the Press, of the existence of the Autochrome process. One daily journal refers to it as "having apparently been invented by some one named Lumière about the year 1907." The exhibition remains open until the end of September, and I can strongly recommend any of my readers who may be passing through Paris this summer to set aside an hour for a visit to it. After it has come to an end in Paris, the exhibition is to be transferred in turn to the capitals of several countries in which French luxury goods find their principal markets, and hence has been dubbed "an exhibition in a portmanteau."

Slower Papers

A GREAT improvement in the quality of photographic printing is likely to result from the growing use of slower-printing papers, remarks a British cotemporary. Most of our leading manufacturers are now offering papers which require many times the exposure which is necessary for the bromide emulsions which have so long held the field, and it will be found upon trial that a much longer scale of tones can be obtained upon the new papers than was possible with the old ones. These papers must not be confused with what have been known as "gaslight" grades, for although the latter were almost invariably suited to thin or flat negatives, the newer papers give the best results with such negatives as would give a good print on printing-out or carbon. It is, of course, possible to obtain fairly good results from such negatives upon ordinary bromide paper; but as a rule the prints are lacking in quality and of poor color, this being due to the fact that a full exposure and short development have had to be adopted in order to avoid vigor. With the new papers it is necessary to use a rather intense light, mercury-vapor or half-watt lamps being the most convenient.

Wollensak World

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DEVOTED TO
LENS AND SHUTTER
INFORMATION

Vol. 1

SEPTEMBER, 1921

No. 9

About Your Vacation Negatives—

Your photographic record of summer holidays undoubtedly includes many negatives that you value highly—negatives of good friends and nature's beauty spots.

Are you merely going to make prints and consign them to obscurity in your album leaves? Or will you enlarge, mount and frame the best, and so keep ever fresh the remembrance of summer days?

You will find an unexpected pleasure in enlarging if you use a Verito Soft Focus F:4 lens. For no matter how wry the negative, you can secure any quality of softness or sharpness, by projection through the Verito. And Verito enlargements would grace the walls of your living room, library or den, more intimately and beautifully than would ever be

SELECT YOUR LENS
from our COMPLETE LINE






B RILLIANT, sparkling, crystal-
clearly sharp in definition,
these lenses are the perfect
choice for the amateur and
professional alike. They are
of the highest quality and
are made to order in the
Wollensak Optical Co. factory.

These lenses are made in the
Wollensak Optical Co. factory,
Rochester, N. Y., and are
guaranteed to be the best
available. They are made
to order in the Wollensak
Optical Co. factory.

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Wollensak Optical Co. factory,
Rochester, N. Y., and are
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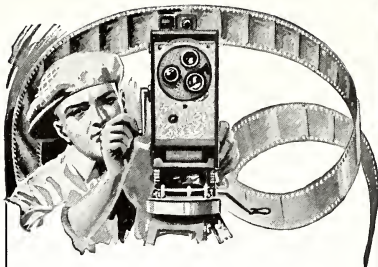
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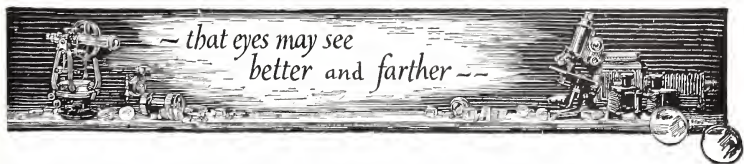
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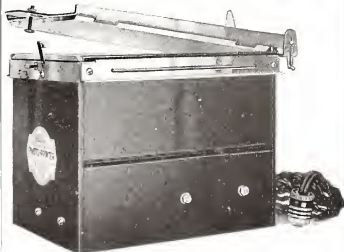
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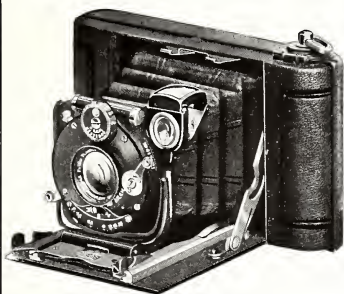
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The American Journal of Photography

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Vol. XLVII

OCTOBER, 1921

No. 4

The Rocky Mountains Park of Canada

DAN McCOWAN

THE Rocky Mountains Park of Canada is situated almost entirely within the Sunny Province of Alberta. This mighty playground has an area of three thousand square miles. It has been set aside as a wild-life sanctuary and as a playground for the people of this continent who care to come for rest and for recreation, for health from its fragrant piney air, for strength from its healing waters, for that peculiar inspiration that can be gained only from the high hills, and for that peace and content which come from close contact with earth's unspoiled places.

Banff, the administrative center of the Park, is a neat, clean, up-to-date town of two thousand inhabitants. It is situated on the main line of the Canadian Pacific Railway. It has been called a "hot-and-cold-water" town. A glacial-fed stream furnishes an ample supply of ice-cold water for drinking, while from the base of Sulphur Mountain there issues a great flow of hot, sulphurous water in which it is a delight to bathe, either in the sunny June days, or in January when the mercury is away below zero.

The Dominion Government owns and operates the commodious bath-houses and swimming-pools which are to be found at the several springs.

In Banff there is ample accommodation for the tourist, ranging from the luxurious Canadian Pacific Hotel to the equally comfortable home-like inns where one may talk "friendly" to the day clerk and exchange confidences with the bell-boy. There are seven hotels in this resort, and the proprietors are not related to the late Ali Baba.

Do you golf? Here then is an eighteen-hole course, with a resident professional at your service. It is not an exclusive rich man's country-club. This democratic government of Canada maintains these links for your benefit, Mr City-Dweller. This is a wonderful golf-course in a

magnificent setting, and even a habitually profane golfer would easily succeed in preserving outward appearances here. There are placid lakes for you to dip a paddle in and there is the thrill of swift-rushing waters for the intrepid canoeist.

The only hunter allowed in this park is the person who "Hunts With a Camera." The modern high-power rifle takes most of the "sporting-chance" out of hunting to kill. Here in this rugged, mountainous country you may procure wonderful "trophics" with your camera, and there is no close season or bag limit to worry over. Black Bear, Bighorn Sheep, Rocky Mountain Goats, and Mule Deer are plentiful, and local guides can be relied on to take you "right to where they live."

Good fishing may be had from July till October. Cut-Throat Trout, Lake Trout, Dolly Varden and Rocky Mountain Whitefish are the principal varieties, and the limit is fifteen fish per day.

The volume of tourist traffic from the United States to the Parks situated in Western Canada is reaching remarkable dimensions. It is usual to think of Canada as a country of virgin forests and of waving wheat-fields. The monetary value of the Rocky Mountains Park works out at about fourteen dollars per acre per year. Selling scenery is getting to be "big business."

It is a great mistake to go through the Canadian Rockies on a barnstormer's ticket, and you cannot "See America First" from your chair in the parlor-car. For the ambitious pictorialist there are Rocky Mountain Peaks untold which the eye of the anastigmat has not seen, and numberless valleys have not echoed the bang of the focal-plane shutter. In the big north woods are camping-grounds a-plenty, yet which have not been littered with the tabs of the film-pack.

God created this Wonderland of the Northwest for the folks who love outdoors. For the whole "1st" brotherhood. The artist, the natu-



OVER THE HILLS AND FAR AWAY DAN MCCOWAN

ralist, the botanist, the geologist—in short, the camerist. And He never copyrighted any of his works.

So there is a greater mileage of film exposed in this region than anywhere else in America. All the reliable American film-manufacturers have agencies throughout the Park, and the Eastman Company has no less than five firms retailing its product in Banff. Unless for very unusual sizes, the camerist may at all times procure a supply of fresh film.

If you use plates, bring a supply with you. There are darkrooms available at all the large hotels and at many of the photographic stores.

For the botanist there is a wealth of flowers and of plant-life. As the valleys are high above sea-level, the flora is principally Alpine. The mountain-sides, to a height of eight thousand feet, are clothed with pine trees. Occasional Douglas Firs are to be seen. They are mostly veterans of the forest and are gnarled and moss-grown. They are very effective when well placed in a mountain landscape, and their rough, corrugated

bark and storm-twisted branches give pleasing camera-studies.

High up, where the air is thin, the larches grow and thrive, and in the deep valley-bottoms the spruce finds that abundance of moisture which is so essential to its well-being. Of the non-deciduous trees the Aspen Poplar is the most prominent. They are graceful feathery trees and, where the trunks have been bleached out by the sun, they look like the birch.

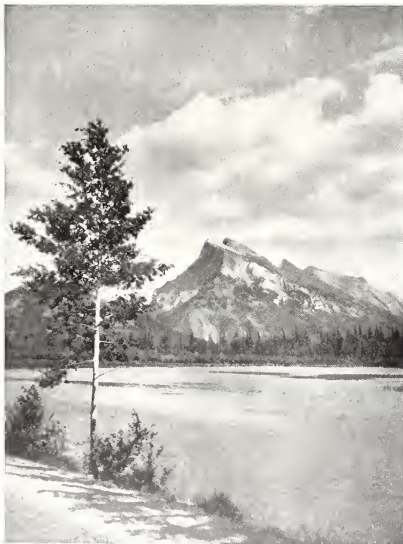
There is little or no wind in these sheltered valleys, so with a kodak and a simple portrait-attachment you can get pleasing negatives from the profusion of flowers and plants which grow in this Garden of the Gods.

The photographer who is geologically inclined will find sermons in stones on almost any mountain-slope, and there is a unique joy to be had in cutting the pages of Nature's History-Book. You do not need high explosives to get these fossils. Trilobites and Brachiopods are very good "sitters," so you can make good negatives of them right where they lived and died. The camerist

can smile at the Simon Pure geologist as he battles with an obstinate rock or staggers along a dizzy ledge "in ballast." A few good lantern-slides from fossil-negatives are sure to prove interesting to those whose knowledge of geology is elementary, and you will invariably be asked to air your knowledge of primeval life. The Alpine Club of Canada has its headquarters at Banff, where the members have erected a splendid club-house on

Banff to Mount Assiniboine. This magnificent monolith, the finest peak in the Rockies, is situated some thirty miles south of Banff and has an elevation of eleven thousand, eight hundred and sixty feet.

The journey to this mountain-region may be made either on foot or on the deck of a cayuse. It is the trip *par excellence* for the picture-maker. There is a wealth of snow-clad peaks, glaciers



JUST CLOUDS, HILLS AND WATER

DAN MCCOWAN

the side of Sulphur Mountain. This club is to be commended for the interest it is creating in good photography. At the annual photographic competition of this body, many splendid Alpine studies are exhibited and there is keen rivalry among these "lofty" artists.

In pursuance of its policy of educating the people to make use of their Parks, and to bring the wonder-places of the mountains within easy reach of the tourist of modest means, each summer this Club installs and operates a chain of camps. These camps will be situated this summer at ten-mile intervals on the trail from

gleam at the head of most valleys, thundering waterfalls and quiet still lakes are ever so tempting, and it is a question of what not to photograph.

Food and shelter are provided at each camp, and the pilgrim is at liberty to tarry as long as the sunny days last. Accommodation is as reasonable as in almost any hotel, and Mr. A. O. Wheeler, director of the Canadian Alpine Club, will be glad to give information about this tour. A word as to climatic conditions. The average temperature for the summer months is maximum 68°; minimum 40°. In these high altitudes evenings



STUDY OF A MULE-DEER

DAN MCCOWAN

are cool, be the day ever so hot; and one should be prepared for this. Good, medium-weight underwear is very serviceable. Knee-breeches and stockings are best for "hiking" in. Putties and leggings are just weight to be carried. A jacket that has been almost discarded is good to wear in the woods.

With such a coat one can lean most comfortably against a gummy spruce. A light raincoat or cape for a sudden thunder-shower; stout boots, well nailed if you are to climb, and a canvas rucksack with two shoulder-straps are desirable impedimenta; a water-tight can for matches is handy, and a pocket flashlight with a safe-light bulb (if such an article is manufactured) would be very valuable to have when filling plateholders in your tent after dark. What camera should be carried? So many men, so many minds, every man

in his own way. A $3\frac{1}{4} \times 4\frac{1}{4}$ Kodak is as good as any for use in picture-trips in the mountains. It is an economical camera to operate and, where there are pictures at almost every turn in the trails, it is easy to run up a large film-bill. This size negative enlarges well and there is none better for lantern-slides. Be sure you *know* your camera before you start on any extensive picture-trip.

There is no humidity up here on the roof of America. It is just as well to have your films in tins and to carry some slide-binder or rubber-tape for sealing. A knock-kneed tripod is a snare and a delusion and should be left severely at home. A three-foot tape-line is useful if you want to make flower-studies with a portrait-attachment. A steel shaving-mirror will sometimes get you a bird-nest picture when the light



AUTUMN

DAN MCCOWAN

AT EVENTIDE



WINTER-SCENE



DAN MCCOWAN



ROCKY - MOUNTAIN SHEEP



WEALTH OF WATERFALLS DAN MCCOWAN

has to be reflected into a shady spot. A foot or two of black court-plaster is carried easily, and it will stick closer than a brother either to your hide or to your injured camera-bellows.

The making of animal-photographs is the author's most popular pastime. It is a branch of the art which is by no means overcrowded, and there is a glorious uncertainty about this form of hunting. Bighorn sheep are comparatively easy to snapshot once you get within range. It is a very great mistake to try to stalk a wild animal, especially if you expect to get a close-up picture. If you try to creep or crawl up to a sheep or a deer, your chance will be very slim to obtain a negative unless you want to get one of the game disappearing over into the next province.

Good results can usually be got if one walks around and about these flocks and herds of sheep and deer. They are in a sanctuary here, and they are beginning to get acquainted with man at close range.

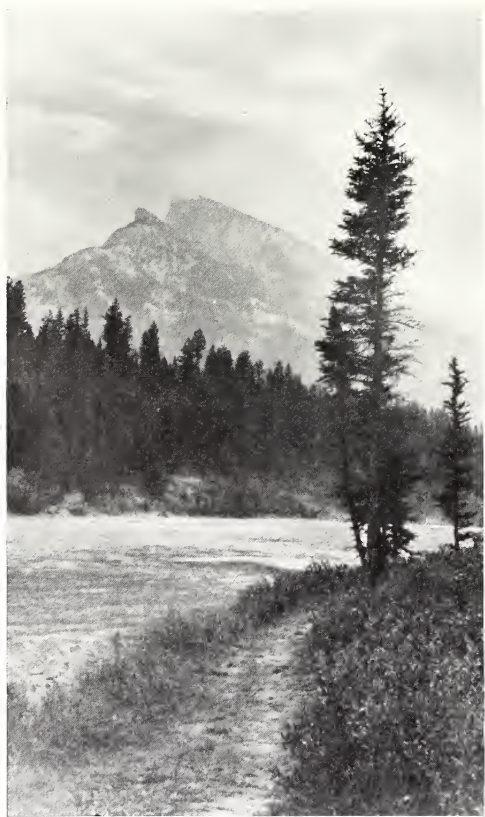
Mountain Goats are extremely hard to pic-

ture at any time. They are shy animals and live on perpendicular rocks. It is a hopeless task to try to snap an old Billy unless you just "happen on him" and see him first. A tripod is a superfluity when you go after goats.

This summer the writer has hit upon a new way to get wild-life studies with a minimum of effort. The principal ingredient in this recipe is just common rock salt. Nearly all mountain-animals are fond of this substance and will travel long distances for a "lick."

Squirrels and chipmunks are difficult sitters. They will not stay put and they have an exasperating habit of staying on the shady side of a tree or a rock.

It is very interesting to note how animals who hunt or are hunted contrive to camouflage their movements. You would imagine to look at a wild deer browsing in the woods that it moved in an aimless way from one point to another. By close observation you will soon learn that they always follow along the shadows from one tree to another.



MOUNT CASCADE, BANFF
J. KIRKLAND HODGES



The Gloucester Camera Club

HERBERT B. TURNER



DOWN on Cape Ann, in the dear old fishing-port of Gloucester, there is a group of artists who compose what is known as the Cape Ann Camera Club. It has an even membership of one hundred, of which about thirty are camera-devotees: some paint on tile, some paint in oil, some in watercolor, some sketch and others are just good fellows. The club has six rooms, large and comfortable ones, with an air of cheerfulness about them. One is a reception-room, one a billiard-room, one a generous lounge, another is used as a studio. There is a work-room which is used as a kitchen when the club occasionally holds a banquet, and there is a large, airy dark-room where two or three may work together. Such, briefly, is this Camera Club down on Cape Ann. It was organised in 1899, so that it is now twenty-two years of age, and from time to time, when it feels that way, it has held an exhibition of its members' work. It is holding one now. There are numerous charming watercolors, by J. B. Cook, a talented and well-known Gloucester artist, who specialises in marine-compositions in and about his chosen city, as well as in vistas of the city itself. I know of no seaport that has such a wealth of pictorial material. There are a few studies in oil, some interesting sketches, and a few decorative examples of H. W. Spooner's work on tile, besides many interesting photographic prints, a few of which have been colored.

Four of the members of The B. Y. M. C. Union Camera Club were honored by being invited to act as judges of the photographic prints. They were Paul Waitt, the writer; Ralph Osborne, the singer; Raymond E. Hanson, and Herbert B. Turner. A first, second and a third ribbon were awarded, and several Honorable Mentions given. Dr. P. C. Proctor, a former president of the club, received the first prize for his "Freebooters," a charming marine-study of a sandy stretch upon which the surf is tumbling. Close to the surf-line, a dozen or so seafaring men are transferring certain smuggled goods from a longboat to an old wagon, the patient horse of which stands knee-deep in foamy water, while beyond, in the distance, is seen the ship that has been the temporary home of the forbidden but delectable things. It is a well-conceived and well-executed picture with much charm about it. Mr. H. W. Spooner, whose pictures in and about Gloucester are well known, received the second prize for his "Lobster Wharf at Rockport"—a very pic-

turesque study of a charming old shack of a lobster-house and pier with a sloop made fast at its end. The writer knows well the scene, and has tried to interpret it more than once, but has never been so lucky as Mr. Spooner has been with his fine cloud-effect, shadows and atmosphere. The soft-focus lens has done its work well in Mr. Spooner's hands, as it has also in the case of Dr. Proctor's "Freebooters."

In the third prize, we have again a print by Mr. Spooner, this time a picture in sharp focus called "The Chart"—a fisherman in oil-skins seated on an old keg with a chart half-unrolled supported by a barrel upon which he is in the act of tracing his voyage, while his sweetheart is following the course with evident interest. The background is almost black in tone, causing the figures to stand out strongly.

Honorable mention was given to a print by A. Myron Tarr, showing a bit of water flanked by foliage with a mountain beyond and clouds above, both mountain and clouds being reflected in the quiet pool. He calls it "Harbor-Pond."

Mr. Conrad R. Hanson was given an honorable mention for his colored picture entitled "Cruise Reflections"—a well-executed bit showing a sailing yacht drifting quietly onward over a soft-toned sea, half reflecting itself in the wave-lets at its stern, while above is an interesting sky.

Mr. Spooner came in for his share of the honorable mentions—"Low Tide" showing a Gloucester fishing-smack at its wharf, fine in tone; a dog's head and shoulders, in gum; a fishing-boat under tow by a tug, the sails of the boat and smoke from the tug being well-lighted by the sun, while beyond is the gloom of a tempest approaching; and a good surf-picture, in which great rollers are tumbling in on a lonely beach leaving masses of sun-flecked spume.

Two more honorable mentions were awarded to Conrad R. Hanson for prints entitled "A Sand-Dune," and "Drear Winter." The former is a grassy dune with a stretch of sand upon which light and shadow play, and the latter a bit of water flanked by brush and tree-covered banks sprinkled with snow, with a dull monotonous sky overhead—drear, bleak winter, indeed! Other prints there were aplenty—of Europe, southern climes, and picturesque New England.

We left with the impression that Gloucester had a cozy friendly club, and, from the work displayed on its walls, felt that the members must be an interesting aggregation of souls.

Remarks on Portrait-Films and Development

E. M. BARKER

THIS is a subject that has been talked of and written about so often, that by many, no doubt, this article will be passed over, just as youthful readers peruse the parts that are most interesting and skip the descriptive part in their eagerness to know how it ends; and, if it does not turn out as anticipated, will throw it aside. The manipulation of films or portrait-films has been a specialty with me in the past few years, and it is a noticeable fact that the handling of them requires more careful treatment than one is disposed to give; particularly so, after having used plates. With the latest improved roll-film cameras on the market, to-day, there is no valid good reason why the best results cannot be obtained with roll-films, if the camerist will only use his head a little.

Some of the work turned out to-day by amateurs plainly shows imperfections in the negatives in the form of straight lines running across the emulsion. Others show finger-marks where the emulsion has softened under the pressure of rough handling while development was carried on. In most cases, the streaks or white marks are caused while the film is being turned and wound up in the camera for the next exposure, with the camera closed. As the smaller cameras are extremely compact, they will not permit winding the film while the camera is closed, as in most of them the folds of the bellows come in contact with the film. This contact causes friction or scratches to appear across the face of the emulsion. When developed, these marks stand out prominently and will surely be produced on the print unless retouched out, which is almost impossible to do successfully. Sometimes, a little dust or grit will find its way into the camera and will cause the same trouble. To avoid this, it is well to examine the interior of the camera and to clean it out thoroughly before using. Place the roll-film in it; but before turning it to the first film to be exposed, be sure to rack out the bellows to its full extent, and repeat this operation after each exposure. By following this rule, you will, beyond a doubt, prevent many films from being spoiled.

There are several contrivances on the market to be had for developing roll-films; but, in my judgment, the old way of handling them—although slow—enables one to arrive at the best result, and that way is to pass the film, as a strip, up and down in a tray of developer. I have

tried all methods, but stick to this one, for the reason that every exposure is in sight during development, and with a slow developer one has an opportunity to watch the action that is taking place in each one. Sometimes, one exposed section will develop more quickly than another, and when proceeding in the manner described, the ones that have not been developed far enough can be cut apart from the others and left in the developing-tray, while those that are completely developed may be transferred to the wash and then to the fixing-bath. When using this method of developing, it would be well to use film-clips and not hold the ends of the roll between the fingers, to avoid marks and softening of the emulsion on the film, which is apt to happen during the hot summer-months.

In tank-development, one is governed entirely by the strength of the developer used and the factor giving the number of minutes the films are to remain in the solution at a temperature of 65 to 70 degrees, when the films are taken out and transferred to the wash and fixing-bath, irrespective of any attention being paid as to whether all the exposures on the roll have been fully developed. As a result, many negatives are good, bad and indifferent. The old way, as said before, I consider the best and surest.

The gelatine-coating on films is very tender and is apt to be injured by the sharp corners of the celluloid. For this reason, films should be washed separately or placed in the washing-receptacle in a manner to prevent them from touching each other. If the whole roll is placed in a wash-box sufficiently large and deep enough to permit the use of a couple of drinking-glasses, they can be arranged so the roll can be wound around them, edge up, during the washing. If cut films are washed, I would suggest a good-sized wash-box, deep enough to allow one or two wires to be stretched across at the top; on the wires hang a few Dennison's clips, to which attach the cut films. There should be a sharp bend of a V-shape in these wires, about two inches apart, in which the clips are strung to prevent the films from sliding against each other during the course of washing. As the water begins to rise and cover the films, they will all lean in the direction the water flows, and will not touch each other. If either of these two ways of washing is carried out, you will be rewarded.

Now as to the mode of handling portrait-films, Since the manufacturers have advanced



HAMPTON ROADS

E. M. BARBER

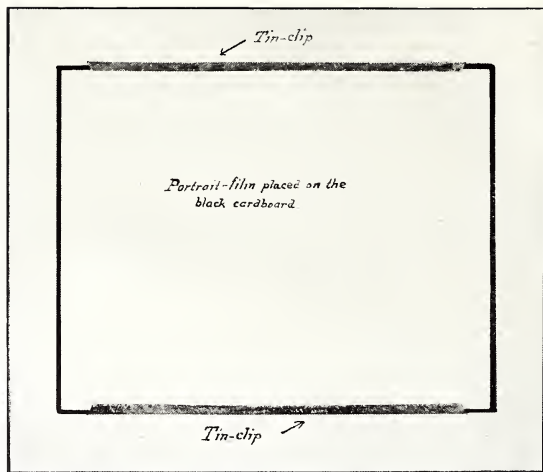


FIGURE 1

the price on glass, the writer has learned how to economise by using portrait-films in plateholders. For instance, should you possess a 4x5 plate-camera, you can purchase one dozen 8x10 portrait-films and, by cutting them into quarters, you will have enough 4x5 films to make four dozen negatives. Compare the cost of one dozen 8x10 portrait-films against four dozen glass-plates and you will realise the amount saved. Several years ago, there was a film on the market called the "Kodoid." It was made for a 4x5 plateholder and was mounted on a thin, black cardboard. The film was held firmly to the cardboard by means of a light tin-clip, as shown by the accompanying illustrations.

On the market, to-day, you will find holders made specially for portrait-films, and if you should be so fortunate as to possess a camera that these holders will fit, it will save you trouble in rearranging your equipment. When using plateholders for portrait-films, I have found it necessary to reverse the groundglass on which the image is focused. By doing this, the focus will be on the same plane with the film in the holder. If, on the other hand, you are forced to use the regular plateholder without changing the groundglass in the back of the camera, you can use the

portrait-films by placing them on a black cardboard by means of tin-clips, as described above. A number of these tin-clips can be made by cutting them out of a thin sheet of tin, the desired length and width, and then by bending them over the edge of a steel-plate the thickness of a glass-negative. Place one of these clips on each side of the card and film, pressing the inside edge lightly with a knife-blade to prevent the film from slipping while in the holder. The black cardboard, for this purpose, should be slightly thinner than a glass-plate and when the film is placed on it, the combination will make the thickness of a sensitised plate.

After portrait-films have been developed, fixed and washed, in the usual manner, they are ready for drying. Before taking them out of the washing-tank, swab both sides gently, while under the water, with raw cotton, to get rid of any sediment that may have clung to the emulsion during the washing; then hang them up by one corner to dry. After they are thoroughly dry, place them between clean, chemically-pure blotters for forty-eight hours, when they will remain in that condition indefinitely. Films, unlike plates, are handled differently, and for this reason care should be taken not to place the

fingers on the face of the emulsion, but to take hold of the films by the corners.

Now for developing. Most of my work is done in the form of enlargements, not contact-prints. For this particular class of work, my aim in most cases is to obtain a thin-quality negative—not too thin, but just strong enough to appear brilliant; for if a negative is too thin, it can be easily strengthened by intensification. By a thin negative, I mean one that has plenty of detail and a thin transparent sky—if outdoor-work is being done—and, at the same time, be dense enough to yield definition without block-

or feeling within me that a certain amount of this or that chemical will produce the best result. By following this method, I do not remember having lost a negative. While this method suits me—but may seem careless to others—I would not suggest that the reader follow it, unless he understands thoroughly what each chemical used in a developer is intended for; otherwise he should stick to a good formula when once mastered. A friend of mine wanted to know what proportion of each chemical I took to make up the developer I used. I told him that I did not know; but the next time I had

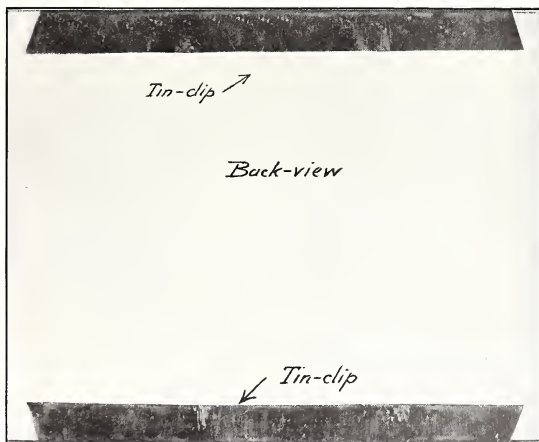


FIGURE 2

ing out the shadows and the highlights. This grade of negative I have found best for making enlargements. I have no fixed formula for developing, having used during the past ten years the old-time pyro as a developing-agent or "reducer." Instead of weighing each chemical, I have had the audacity to pour each chemical into the palm of my hand—just what I considered enough to suit the exposure I had made—and then into the graduate. The only exception is when measuring the quantity of bromide to be used. I do not do this, simply because I do not think it is not proper to weigh each chemical accurately according to a fixed formula; but knowing, at all times, the amount of exposure given to each film, there seems to be a knowledge

occasion to mix up the solution, I would weigh each ingredient and report. The following was the result:—

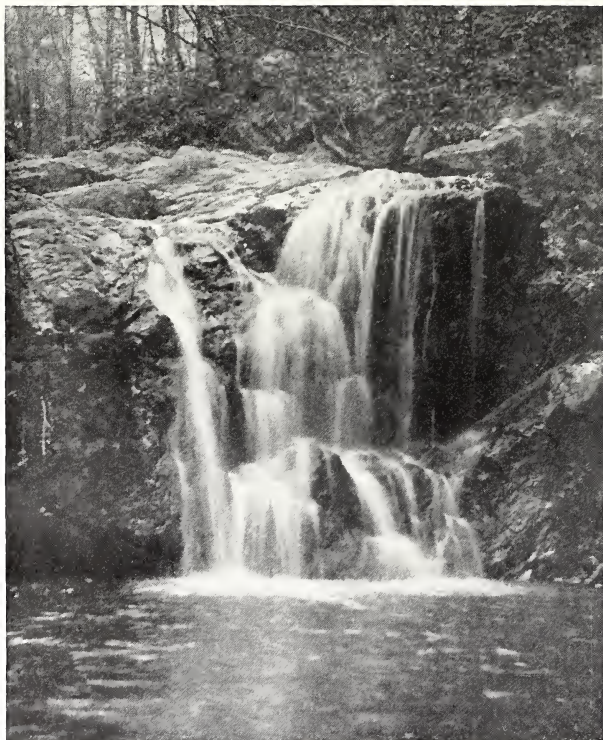
Water.....	5 ounces
Sulphite of soda, desiccated.....	90 grains
Carbonate of soda, desiccated.....	9 "
Pyro.....	7 "
Potassium bromide, 10% solution....	15 minims

Try it, and see for yourself how it works.

The proportions seem all out of reason when you compare it with other formulas; but it does the work satisfactorily.

For developing plates and portrait-films, I do not think a better method could be followed than the one I shall now submit to you.

Should you figure one-fifth of a second to be



FALLS NEAR PATAPSCO RIVER
C. M. BARKER





THE TROUT-POOL

E. M. BARKER

enough for a fully exposed plate or film, you may give it thirty or forty times this exposure, if you like, and be sure of getting the best result. Those who make their own solutions, are supposed to know the action of each chemical used in a developer. While it is a known fact that sulphite of soda is used as a preservative, which prevents the plate or film from staining, a smaller quantity of this chemical will produce a warmer tone, and a larger quantity a gray or bluish-black tone. Now, while this is true, sulphite of soda when used in excess quantity acts, to a certain degree, as a restainer, and when used in the manner I shall describe for developing, you will accept it as a fact. Before going into detail, three graduates should be used: eight-ounce, four-ounce and one-ounce, also one eye-dropper.

Into the eight-ounce graduate pour eight ounces of water, to which add sixty grains sulphite of soda, desiccated; six grains carbonate of

soda, desiccated; twelve grains of pyro and five minims of a 10% solution of potassium bromide.

Into the one-ounce graduate, pour one ounce of water, to which add sixty grains of carbonate of soda, desiccated, and twenty-five minims of a 10% solution of potassium bromide.

After all this has been prepared, and everything is ready for developing, pour into the four-ounce graduate what you will require of the solution made up in the eight-ounce graduate. Turn out all the lights, except the ruby, place the plate in the tray and pour on it the contents of the four-ounce graduate. Now begin to develop in the usual manner. It may take from four to five minutes before anything will appear, as the action will be very slow; and the fact of the plate remaining in the strong sulphite solution so long has a tendency to convert a highly sensitised plate into a medium or slower one. At the expiration of four or five minutes, you

will observe the highlights beginning to appear. At this stage of development, pour the developer back into the four-ounce graduate and, by the aid of the eye-dropper, add two drops of the strong carbonate of soda which you made up in the one-ounce graduate. Pour the developer again on the plate and watch it build up slowly. If then it does not develop to the desired point, keep adding one drop after another of the carbonate of soda solution until you consider development complete.

After developing the first plate, do not use the developer again, but throw it away and start the next plate with a fresh solution. Repeat this operation. If you should use the same developer on the second plate, the result may be disastrous, for the reason that a very weak developer was used on the first plate and was gradually strengthened during the process of development and, in all probability, will be too strong a developer to start with on the second plate. You may try it for your own satisfaction, if you like; but I should not advise you to, if you value the exposed plate. Every plate should be developed with a fresh developer. This is the reason I suggested taking just enough of the solution from the eight-ounce graduate for the plate to be developed, and to use more of it for the second plate, and so on, until all the solution in the eight-ounce graduate is used up.

There is no danger of fog; but there is some satisfaction to know that a negative of the finest quality will be the result. With this article is a photograph of Hampton Roads made with a 4x5 camera and enlarged to an 11x14 inch size, on P. M. C. Bromide paper. The exposure given was nine seconds through a three-time ray-filter; stop used, 128; plate, Hammer Red Label; light, very bright; plate developed by the process described above. Another plate was exposed without the use of the ray-filter; time 1/5 of a second, and developed by another formula that always gave good results when the plate was given correct exposure; but the exposure of 1/5 of a second in this instance was overtimed.

On November the first, 1920, I took a trip to Great Falls, on the Potomac River. Between the hours of 11.30 A.M. and 4.30 P.M., I made eighteen exposures, some 1/5 of a second and others three seconds, using a 16 stop. All were developed in the manner described above, every negative being alike in quality and as described in the beginning of this article.

My greatest pleasure in photography is when I am wandering through the country in search of little bits of artistic scenery. Here and there, we occasionally find nature in its most beautiful form; but to reproduce it in a picture as near as the eye sees it requires considerable study and patience. The lighting at the moment may not be ideal for an exposure; but it is worth while to wait for the proper lighting or to postpone it to some other time. Almost any one can make an exposure, develop a plate or film and make a print—in a mechanical way; but without using good judgment in all these branches, good results cannot be expected. It simply means that time and material are thrown away.

All users of cameras, no matter whose make—whether they be for plates or films—should study their equipment thoroughly, practice with it until they understand it fully. The lens and shutter are the most important of all. Keep the lens free of dust and moisture. Learn the use of the different stops or diaphragms, and, last, but not least, the speed of the shutter. Take your camera out near your home and make several exposures on one subject, using but one size of diaphragm-opening in the lens. For instance, use the 16 stop, and on a bright day expose three plates or films giving the first 1/25 of a second; the second 1/10 of a second, and the third 1/5 of a second. Develop them, and be fully convinced which of the three exposures makes the best negative. If the best one should prove to be a normally exposed plate, you will have a basis on which to work when taking the camera with you on a more extended trip. The importance of a thorough grasp of the camera, lens and shutter cannot be over-emphasised.





THE MILL AT NANTUCKET
R. E. SCHOULER

Reminders

FREDERICK C. DAVIS

PICTURES tell stories better than words can tell them. Very many times there is something you wish to say and cannot. In a case like that, little photographic messengers or reminders, such as discussed in this article, are invaluable. Other cases, too, are such that the little photographs are the best means to convey an idea. The commercial world can use the little pictures, and almost everyone can get something from them that he cannot get elsewhere, even if it is only the novelty of their size.

For instance, notice the photograph of the girl looking in the mail-box. The girl in the picture has a very novel idea for using the pictures. She of course corresponds with her friends a great deal, and cherishes their letters as most girls do. Then if Mary is very slow about answering a letter from this girl, the girl pens a very short note such as, "What's the matter, Mary; have you lost your pen?" and places a reduced print about the size of a postage stamp in the corner of the sheet of paper. That message is so vivid, that no one can miss it. Being a novel thing, it does not easily drop from the mind. The very small picture is of value to the recipient, who has never seen one before. And the result is a letter.

The same girl, on Valentine's Day, could not, of course, go to the expense of buying a valentine or a present for each friend, and since stereotyped greeting-cards are so common now, she decided on the scheme of including with a letter of greeting a small photograph. The picture was made, and one placed in the corner of each letter, which were mailed to select girl-friends—and one very select boy-friend. The valentine-greeting is very effective, and its novelty makes it stand out from the other same-old-greeting-card received from other persons. The use of these small pictures gives an individual quality to her that other girls do not possess—which is something dear to the heart of every girl. Isn't it?

The commercial world is in for a share of the benefits of these small photographs, too. One man, when collecting delinquent accounts, had a photograph made for use in that connection. The photograph was of a man's hand emerging from an empty pocket, pulling the pocket inside out. A small caption below to the effect, "I can't pay my bills unless you pay yours," made the whole very effective. The use of a half-tone would not have carried the message so effectively as a small photograph, for the reason that half-

tones are common, whereas pictures of such small dimensions are not. Moreover, the customer saw that he was in for personal attention, and not a form-letter notice or a rubber-stamp hurry-call. He paid his bill. More bills were paid when this little device was used, than before.

And so on down the line. Everyone can find use for these small photographs. I think that it would be a very good idea if persons who correspond a great deal would have a few of these small photographs made, and put one in the corner of their letters at some time. This would give each one a chance to see what the other fellow looks like. Also, personal calling-cards are easily lost, and if one of these pictures is pasted on the back of a card when on an important mission, the fact is at once established whether the person presenting the card and his name and picture agree. But I cannot begin to tell of the hundreds of uses for the little photographs. Each person must work out his own ideas. I will proceed now to tell how to make the small photographs.

In the first place, the larger pictures are not enlargements of the smaller ones, but the smaller ones are reductions of the larger ones, which are of ordinary dimensions. The method of making these small pictures is very simple and easy.

Almost every photographer has an enlarging-camera. All that is necessary to make the small photographs, is to place a copying-lens over the regular lens of the enlarger. Place the negative in position in the carrier, turn on the light, and see that the auxiliary lens is correctly placed. Pull out the enlarger-bellows to its full length, and keep it extended. Focusing must be done by moving the whole enlarger, or the easel, backward or forward. When the proper focus is found, the result on the easel will be a very small image.

This small square of light will seem to be very bright, and to need only a very short exposure; but in reality it requires an exposure almost the same as when an enlargement is made. The correct exposure, though, can be determined only by experiment, for every enlarger has its own peculiarities and every brand of paper its own speed. Determine the exposure. This having been done, place the red cap over the lens, and fasten the sensitive paper in place.

A word about paper. The use of gaslight-paper will result in prohibitively long exposures. Bromide or enlarging-paper is almost necessary.



FIGURE 1

In any event, a paper that is very smooth and which will show all the microscopic detail is necessary. I never like to use glossy paper except when doing commercial or reproduction work. In the case of the small reductions, I use glossy paper; but I do not burnish it. This is entirely satisfactory. When paper is glossy but unburnished, you see the picture and not the paper. Glossy surface and rough surface have a tendency to distract the eye from the photograph to the photographic medium. This is not desirable, of course. The use of glossy, unburnished paper does away with that entirely. When looking at a print made in that way, you forget that the picture is printed on any particular surface of paper.

Handling the very small pieces of paper, when making only one reduction at a time, is somewhat inconvenient. I use a whole sheet of paper, and by shifting the paper on the easel, I give three or four exposures on the one sheet. When this sheet is developed, the three or four images build themselves up simultaneously, and development is complete in each case at the same time, provided the exposure for each image is the same. Then by simply trimming, each photograph is given a very narrow, white border, and it then looks exactly the same as if it were made by itself. Making three or four at one time saves time. The little prints are developed, fixed, washed and dried in the usual way.

If you wish, you may stop there. When you want to fasten a small print to your letter,

you may put a dab of paste on the back of it, and then place it in the position you want it. But it is more convenient to have the small pictures gummed, like labels. This is not difficult to do. You will find the method given here for gumming prints very useful for gumming other things, too.

In case you wish the small prints gummed, do not cut them apart if you have made many on one sheet of paper. The big sheet is laid on a smooth surface, and mucilage is applied to the back of the print. Thin glue will do as well as mucilage. Library-paste will not do. After the adhesive has been applied, the prints are laid, sticky side down, on a ferrotype plate. This will not harm the latter in any way, for any glue left on it can be easily removed with hot water. After the print has been placed on the plate, squeeze it carefully; but do not press down hard enough to squeeze the adhesive from between the plate and the print. Allow the glue to dry, and, when thoroughly dried, the prints can be stripped off and trimmed. Each will have a backing of adhesive, like gummed labels, and can be fastened to a letter by simply moistening the back. A celluloid-sheet can be used instead of a ferrotype plate, or a very clean glass sheet will do. Be certain beforehand, though, that the glue will not adhere to the glass, for then the print would have to be soaked off. After the prints are stripped from the burnishing-surface, pour boiling

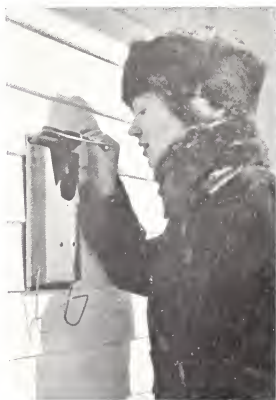


FIGURE 2

water on it to remove all traces of glue that may have adhered. The plate is then ready for use again, or to be used for burnishing prints. It can be made doubly clean by rubbing with wood-alcohol after all the water has been wiped off.

Any camera will suffice, of course, for making the original negative. The negative must sparkle and be strong, for a weak negative will make a muddy reduction. In fact, the negative should be slightly contrasty. The photograph must not depend on fine detail to tell the story, for the finer details are almost invisible in the reduction.

Use a mask with the negative when making the reduction, so that it will be possible to have a white margin on the prints (reproductions). A margin of about one-sixteenth of an inch is sufficient for the small pictures.

The larger photographs illustrating this article are about two inches by three in size, marked down from a $3\frac{1}{4}$ by $4\frac{1}{4}$ negative. The smaller pictures, made with the same mask as the larger ones, are about $1\frac{1}{16}$ by one inch, not including a border.

The camera used in making both pictures was a No. 3 Kodak equipped with an Ilex Anastigmat lens, F/6.3, and an Ilex Acme shutter. An exposure of $1/25$ of a second at F/8 was given for the mail-box girl. The Eastman roll-film was developed with pyro in a tank, and the print was made on glossy Velox. The smaller print was made on Velvet Bromide. The other photograph was made by flashlight, with the remaining data the same as for the other print and reduction. Obviously, good workmanship is required.

My First Photograph

THEODORE EITEL

Number Four



ACTUATED by a desire to learn something about the art and science of pictorial photography, I procured a copy of the *American Annual of Photography and Photographic Times Almanac*, for 1891, the pages of which were graced at that time by the names of such early workers as Catherine Weed Barnes, Charles Scolik, Ottomar Jarecki, Rudolf Eickemeyer, W. I. Lincoln Adams, P. C. Duchochois, Victor Schumann, E. Obernetter, and many others. All of the contributions to this publication were of an interesting as well as of an instructive nature, especially to one who was eager to acquire knowledge along that line. I read and re-read the volume, studied its contents from cover to cover, including even the advertisements. How strange it all looks now, this old, time-honored book, bearing announcements of the product of the Harvard Dry-Plate Co., Wuestner Eagle Dry-Plate Co., John Carbutt, The Eastman Co.'s rollable transparent film, etc.

The reading of this 1891 Annual aroused my desire to read more on the subject of photography before entering into the practice of it, in consequence of which I procured all of the succeeding numbers of this annual, as they were issued; studied "The Elements of a Pictorial Photograph," by H. P. Robinson; "Art-Essays," by John Burnet; "Naturalistic Photography," by Emerson—splendid works, with which you all are, no doubt, familiar. Studied also Meyer's

"Handbook of Ornament," Blunk's "Die Formenlehre," Jackson's "Theory and Practice of Design," and others. When the summer of 1898 approached, I felt that I was now thoroughly equipped with a goodly stock of theory which would enable me to carry on the practice of pictorial photography without any trouble.

All darkroom-appliances were complete, also a home-made lantern consisting of a very stout wooden box about twelve inches square and eighteen inches high, holding a coal-oil lamp with a large, flat wick and capable of raising the temperature of the bath-room to a tropical one in a few moments. The fact of the matter was that I received more heat than light. A highly important accessory was a home-made plate-washer which had a capacity of six plates, and in which the water passing over the upper plate had to pass over all the rest of the plates before reaching its destination, viz.: the waste-pipe of the bath-tub. The room was further equipped with a double, black curtain which excluded the least particle of actinic light, and a snug home-made cupboard which held an assortment of trays from 4×5 to $6\frac{1}{2} \times 8\frac{1}{2}$, printing-frames of corresponding sizes; all the necessary developing-and-fixing-material; but no reducing or intensifying agent—for did not all of the authorities, which I had read, say: "Get it in the negative!" The day following the completion of this outfit marked the arrival of my camera, a Rochester Optical Co. "Empire State" view-camera, a



MY FIRST PHOTOGRAPH

THEODORE EITEL

Bausch & Lomb II A Anastigmat, and a heavy tripod which I think was intended for a 14 x 17 camera. Well, this stuff surely looked good; little heavy, but then a few extra pounds make no difference to one who had youth and an immense supply of enthusiasm.

The following Sunday was chosen for the initial attempt with this apparatus, and a spot was selected where I was sure that no one would disturb the operation, and where any evidence of possible stage-fright on the part of the camerist would be passed unnoticed. On my arrival at the scene, about 5.30 p.m., the subjects—a number of levee-loafers—were readily assembled and I was about ready to proceed with matters, when one of the fellows suggested pushing the "Rocky Road" cart—a device for moving saw-logs on the river-front—into the picture, which was agreed upon. Right here, allow me to add the comment that the irony of it all had not struck me until I looked at the negative of years ago, with the admonition, "Rocky Road," about the most prominent thing in it. The amount of exposure to give this first plate worried me some, but I finally decided on three seconds, which, under the conditions—bright sunlight, 5.30 p.m. on a July day, a lens working at $F/6.3$, if my memory serves

me properly, and a Seed 26 X plate—was certainly ample, and entirely in keeping with all theory which I had studied, viz.: "Expose for the shadows and let the highlights take care of themselves." Only one exposure was made, the apparatus bundled and back home, with a rush, to learn what would be revealed. The bath-room was closed up, the double, dark curtain placed in position, and then the darkroom-lamp was lighted, the plate was slipped into the developer and closely inspected every few seconds. Yes; it was progressing strictly according to what I had read. Then the time came to take the plate out of developer and to place it in the fixing-tray—but I decided to leave it in a little longer, to be sure that none of the picture would get away. Back it went into the developer! It stayed there until it was about as black all over as it could possibly get—in fact, so black and dense, that it took two minutes' exposure to a noonday sun, with a rapid developing-paper, to make the print for the accompanying illustration.

This is the story of my first photographic attempt. It ended dismally; but it was the entering wedge into the practice as well as study of pictorial photography and, though a "Rocky Road," it was tempered by joys which were the

result of my deep and sincere love of nature. Gradually, the book of pictorial knowledge was opened to me, and I drew from it inspiration. Certainly, nothing in life has given me more pleasure and satisfaction—the seeking out of subjects for pictures, in woods and fields; the calling into being of the latent image, and the conversion of the negatives into completed pictures to gratify my family and numerous friends. It was then I felt the truth of the declaration that photography was a boon to humanity.

To a further request from the Editor—to furnish a record of my camera-activities since the making of my very first photograph—I comply without hesitation. The practice of photography carried me into the woods of our country, where it was possible to come in touch with the magnificent specimens of beech-trees, great numbers of which abound in the woods of Kentucky and Southern Indiana. The principal characteristic of these beautiful trees is the grouping of their foliage, and the marking of their trunks which Nature's master-hand has painted on all beech-trees, almost without exception. These trees not only present material for the photographer in their splendid summer-garb when they are festooned with their foliage, but at all seasons, and in all of their moods, they have a pictorial message for one. The autumnal season presents them in the most glorious array of color imaginable, which lasts well into early winter, as they shed their leaves very late. Winter-time, which in our section is generally open, presents these splendid photographic subjects in a fine, silvery-gray color, and the sight of a forest of beech-trees on a bright, wintry morning with unclouded sky, casting soft shadows transparent with color, the marking on the trunks at that time presenting all of its beauty, will always be remembered by one who is a lover of the woods. Words fail to describe the wonder of a Kentucky beech-woods, and the lure of these trees has animated many to their portrayal. To a local painter, Mr. Carl C. Brenner, in all probability belongs the distinction of first calling attention to their glory. It was he who not only made the Kentucky beech-woods famous, but who before his death, some years ago, even made himself more famous by their portrayal in color.

The results of the early years of my work were shown in the Second Chicago Salon, New York Salon, Salon Club Circulating Portfolio, *Inland Printer*, *Photo-Era*, *American Annual of Photography*, *Country-Life in America*, *International Studio*, and *Art in Photography*. All the reproductions shown in afore-mentioned were prints of beech-woods. An excursion into the field of portraiture, some years ago, brought me the

first prize in a genre-contest, conducted by PHOTO-ERA MAGAZINE, and the Grand Award in the *Youth's Companion* Contest for Amateurs.

In a landscape-class, I was awarded second prize in a contest arranged by Bausch & Lomb Optical Co. some years ago, open to the users of their lenses, and in a like class I was awarded a Bronze Medal in Buda-Pesth Salon, held several years before the war. The genial Editor of PHOTO-ERA MAGAZINE, Wilfred A. French, has afforded my work a liberal share of publicity in the pages of his splendid publication, and to him is due great credit for the stimulus he has given the photographic art of our country, and for his intelligent and untiring efforts to place our art on a continually higher plane.

[Theodore Eitel, the author of the foregoing sketch, excels in genre and landscape, but though he achieved brilliant success in the portrayal of interiors with figures, his deep love of the woods lured him away from his first love. The admirers of his exceedingly beautiful wood-scenes and tree-studies, that have appeared in this magazine, since 1905, will applaud his choice of pictorial activity. January, 1905—"The Newspaper", a masterly indoor-genre (awarded the first prize in PHOTO-ERA Third Annual Photographic Contest); "The Harvest-Field", "Landscape" (awarded the tenth prize in the landscape class); March, 1905—"The Beeches"; July, 1905—"Quietude" (a fascinating wood-interior with brook); October, 1905—"The Old Farm", and "Landscape-Study"; December, 1905—"Gossip" (landscape with figures), and "A Bit of News" (landscape with figures); January, 1906—"Your Move!" (group of chess-players and onlookers) awarded third prize in genre-class, in PHOTO-ERA Fourth Annual Photographic Contest), and "At the Edge of the Forest" (awarded first prize in the same competition); November, 1906—"The Beeches in Autumn"; February, 1907—"The Flute-Player"; March, 1907—"Landscape"; May, 1907—"The Grays of Spring" (wood-scene and brook); May, 1909—"Among the Beeches"; September, 1910—"The Forest and the Camera", the most delightful, practical and helpful story on the subject that has ever come to our attention, and illustrated with seven large wood-scenes of supreme beauty—the acme of Mr. Eitel's superb artistry: "Einsamkeit" (solitude, in the woods), "Shimmering Branches", "Cascade in the Woods", "Waldweg" (path in the woods), "Sentinels", "A Forest-Brook", and "The Music of the Woods"; March, 1911—"Beeches"; July, 1911—"Woodland Mystery"; November, 1912—"Beeches"; and, June, 1917—"Wood-Interior."—EDITOR.]



SENTINELS
THEODORE EITEL



BOYS WITH GOAT

STOCKTON VEAZEY

Photographic Bread Upon the Waters

STOCKTON VEAZEY



HE immense value and far-reaching influence of simple things are not fully understood or appreciated.

The excuse for inserting such a statement in a journal devoted to photography is that it is directly applicable to pictures—plain photographs without evidence of unusual skill or artistic composition, just photographic records, which, well done and serving to recall some person, place or thing, may have great possibilities. The three prints which accompany this statement are offered to substantiate the claim. It is purposed to show that two pictures given away proved bread upon the waters which returned before many days. The

third was a case where the bread "returned" even before it had been cast, as will be seen.

BOYS WITH GOAT. It was in the early days of the automobile, and good roads were just being discussed earnestly. The country-people were strongly against the "benzine buggies," and their horses voted a unanimous assent to the prejudice. The author at that time possessed a small runabout of popular make, and was spinning along a mountain-road when he came to the home of the district road-supervisor. It was a comfortable log-cabin with a huge, snow-capped mountain for a background. His boys were romping with a big, black goat, a "gentleman" goat, and the fun was worth watching. (We knew of the presence

of the goat before we saw him; but that has nothing to do with photography.) After some patience, persistence and tact, both boys and goat were persuaded to pose for a picture, the camera being an invariable adjunct to the motor.

A 16 x 20 enlargement was later presented to the road-supervisor, who showed such whole-souled appreciation that the gratitude seemed

JUMPING DOG. The superintendent of the city-park had a Collie dog that he thought a great deal of. Noticing the dog's habit of jumping up and kissing his master's face, we photographed the pair in the act. The motion was rapid and it took a fast shutter speed to stop action on the plate. Even then, the dog's tail was slightly blurred; but there we go after technicalities.



JUMPING DOG

STOCKTON VEAZEY

out of proportion to the gift. And a week later, when the writer was stalled in the mud a mile from the place, willing assistance was given in the form of horses and men, the supervisor personally conducting the "campaign of extrication" with a joy that made quick end to our troubles. The author and companion were then taken by force to the mountaineer's home for dinner, and were compelled to absorb a massive quantity of roast wild duck with crab-apple jelly, the meanwhile listening to further complimentary remarks relating to the picture of the boys and their pet.

An enlargement was given to the owner of the dog. He was surprised and pleased, gave us the freedom of the small zoo, induced a little fawn to pose for us and even offered to go in the bear's den and be photographed in wild company, but that was a trifle too much realism and with possibilities we might not have counted on, so we called a halt outside the den. On the next birthday of our young son, there appeared at our home a small basket with a junior Collie a few weeks old, as a gift—the consequence of our picture. Surely, our efforts were rewarded.



CAPTAIN ON BRIDGE

STOCKTON VEAZEY

CAPTAIN ON BRIDGE. We made a sea-voyage once. (Never again.) They said that what would happen when the ship rolled would be "good for us." Again, never again! But before the rolling began, the skipper took an observation from the bridge. In violation of printed restrictions and ship-orders we climbed the steps and photographed the captain in action. Instead of putting us in irons for the rest of the voyage, he turned around and took us into his cabin, put a dish of fruit before us—which would have been good had not the rolling begun so soon—and made us feel personally conducted the rest of the trip. And all this extra courtesy was in advance of any picture or a promise of one. We learned early in photography not to count unhatched poultry, and made it an invariable practice to give pictures as a voluntary offering instead of in fulfilment of a promise. The captain in due time was presented with an enlargement, and it now hangs in his home.

These illustrations could go on almost indefi-

nitely. We have a long list of negatives and prints each of which recalls something of interest, but for lack of additional space we stop.

The possibilities of the camera as a letter of introduction, letter of credit, or letter of admission, are better realised when we share its pleasures with others.



WE all know individually that we are all born with taste—that is to say, with some mysterious "inner light" or intuition that enables us to tell the difference between what is good and what is bad, without any education in that direction. I am constantly meeting people who say, "I know nothing about architecture, literature, or painting, but I know what I like." and I always feel tempted to say to such people, "If that is true, you would have knowledge, and taste indeed!"

A. CLUTTON BROCK.

An Obscure Cause of Staining



Is it possible for germs in tap water to bring about a discoloration in photographic gelatine, the action being dependent upon the presence of a certain chemical?

From recent investigations of a peculiar staining-problem, I am inclined to believe that it is not only a possibility but a probable cause of quite a lot of staining in prints and negatives. Some little time ago I was badly worried by spasmodic appearances of yellow stain in bromide and gaslight prints. At first I suspected the paper, but found that three different brands of gaslight and four of bromide were all likely to show stain. The stain was even and apparently permanent, a great variety of chemicals being used in an endeavor to bleach it; but without result. Exposure to strong daylight had no effect; in fact, the stain seemed to gain depth with age. Suspecting the developer, a brand of amidol, the brand was changed; but without definite results. It was, however, noticed that when a certain brand was used in conjunction with a fixing-bath containing acetic acid the staining was worse than ever. A change to metol-hydroquinone was followed for a time by absence of the trouble; but as the weather at the time was very changeable and the normal temperature different every day, the M.Q. was not so good for general work as amidol. Things were improved by the adoption of a heating box made from a tin biscuit-box containing a 16 e.p. carbon filament lamp. By using this as a stand for the developing-tray, the developer could be kept in the neighborhood of any desired temperature. But the stains reappeared.

It had previously been suggested to me by Mr. Cullen, of Kodak, Ltd., that the trouble might be purely between the tap-water and the gelatine, and on examining this possibility I discovered that the stain was controlled by the length of time the prints were wet. By rushing matters and shortening the period of wetness to the minimum, the stain was avoidable. But with large quantities of work it is often necessary, or at least convenient, to leave batches in

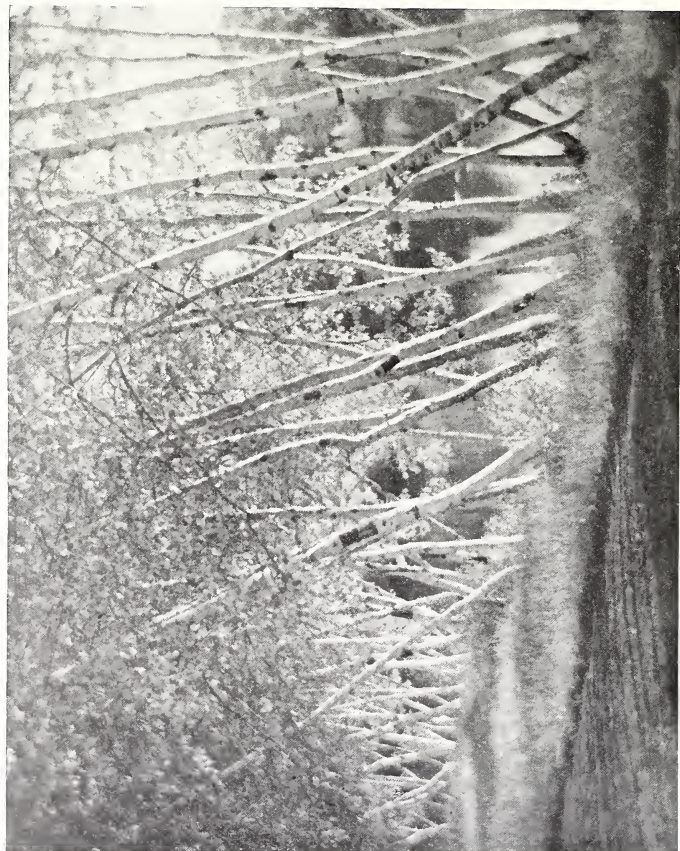
overnight, and it is always necessary to wash large batches thoroughly. This was where the staining agency got to work. I eventually suspected germs to be the fundamental cause; and to test the theory I divided a pint of water between three trays and doctored two of them with antiseptics, putting a trace of potass. permanganate in one and a few drops of mercuric chloride solution in the other. The third was untouched. A vignetted print was taken from the fixing-bath and torn into three pieces, which, after a short wash, were put into the dishes, one in each, and left for twenty-four hours. The strips in the doctored dishes were still pure in the whites after this immersion; but the third one showed signs of discoloration. A second test came out the same way; but as might be expected, no violent staining properties were in the water at the time they were desired, and so the tests were not as decisive as they might have been had the un-doctored water stained more pronouncedly. However, it was decided to treat all water in which prints were left standing with a few drops of permanganate solution, and since then the trouble has not been in evidence.

I have since heard from Messrs. Kodak that the production of this particular stain is only possible when alum is in use, and, as a matter of fact, all the staining I had experienced was with prints that had been through hardening-fixing baths. I have since left prints overnight in untreated water without any sign of the trouble, the same prints being unhardened.

During the time that I experienced the staining I did not find negatives affected; but experience in past times leads me to believe that the same thing is possible with the gelatine-coating on plates, though an observation of mine would suggest that plates are not so likely to show it. The observation referred to is that the stain starts on the underside of the gelatine-film, sometimes being quite distinct by transmitted light before appearing on the surface. With plates, the underside of the emulsion is, of course, more difficult to get at.

THE EDITOR, in *The British Journal*.





BIRCHES

RAYMOND E. HANSON



EDITORIAL



Pedestrian Picture-Making

IN these days of luxurious transportation by automobile—not considered by physicians to be conducive to health or longevity—it is refreshing to hear of the camerist who prefers to exercise his outdoor-sport as a pedestrian or an alpinist. It is safe to state that a very large number of camerists prefer to go in quest of their pictures by using nature's method of locomotion. They are thus enabled to study promising picture-material with deliberate care and without having their attention diverted by the excessive sociability of friends or companions. The true artist likes to be by himself as much as possible when seeking artistic camera-subjects, and when desiring to study conditions conducive to the most artistic results. In traveling rapidly by automobile along a highway, along a wooded road, or through a hilly or mountainous region, the discerning pictorialist may be able to detect a promising view or subject, but in order to grasp the significance, beauty and possibilities of the subject of which he obtained only a momentary glimpse, he needs to return later, by himself, to the spot, and often he will find it difficult and expensive to do so. It is for this reason that the conscientious pictorialist prefers to select his subjects, and to study them, when afoot, although he naturally uses the automobile or the train to reach a region that is filled with fine pictorial material.

The beautiful picture of a row of white birches made intensely effective by the rays of the setting sun—shown elsewhere in this issue—was discovered by the Editor as he was passing through the region of the Middlesex Fells by automobile, last summer, at a high rate of speed. The striking picture did not fail to arrest his instant attention. Speaking of it, a few days afterwards, to his friend, Raymond E. Hanson, he urged this pictorialist to visit the spot at the same hour, namely 6.30 p.m., and make notes of the conditions of light, in order to obtain the best possible artistic result. Like the artist that he is, Mr. Hanson arrived at the spot half an hour earlier, watched the slowly changing effect of light and shade, as produced by the rays of the late-afternoon sun, and found that at the hour designated the view seemed to offer a favorable opportunity for an exposure, which he made without delay. He remained in the vicinity for

nearly an hour, afterwards, but was unable to improve upon the view beheld by the Editor.

Like the naturalist and the golfer, the camera-enthusiast will gladly walk many miles in pursuing his hobby as an outdoor-sport, and, presumably, return with trophies, a good appetite and prepared for a good night's rest. Indeed, advanced age of the voluntary pedestrian offers no obstacles, for the older he grows, the more energy and ardor he seems to manifest. Here is our young friend, W. H. Blacar, for example, a supposed invalid, at the age of seventy-two, taking a camera-tramp with "a fellow of seventy-seven," as he expresses it, and, when he reaches home, the pedometer registers six and one-half miles! He states that he has frequently walked seven miles on a Sunday, photographing on the way, and that five miles is the length of his average camera-outing. These are object-lessons for those amateur-photographers, enjoying good health, who think that they need a conveyance to reach camera-subjects not near at hand.

A Rare Pictorial Opportunity

THE Pilgrim Pageant given as the leading feature of the Pilgrim Tercentenary, at Plymouth, last summer, promised to yield a rich harvest of artistic memorial photographs. But alas! Records, many of them technically admirable, were produced in vast numbers; but very few pictures left the camera, amateur or professional, that could lay claim to pictorial distinction. The historic town of Plymouth, though not situated on a "stern and rock-bound coast," yet favored with a picturesque setting; the unique and oft-repeated pageant; the spacious and well-filled grand-stand with President Harding and other distinguished guests delivering memoranda addresses, and the little harbor crowded with watercraft, including the specially improvised "Mayflower" and the medieval viking-ship, surely offered ample picture-material for the most exacting artist-photographer.

But are we to be entirely disappointed in the hope of beholding the product of the interpretative skill of our famed photo-pictorialists? Or is F. J. Mortimer's celebrated picture of the "Mayflower" leaving the harbor of Plymouth, England, as she did September 6, 1620—published in PHOTO-ERA, September, 1919—to remain without suitable companions?



ADVANCED COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value \$10.00.

Second Prize: Value \$5.00.

Third Prize: Value \$2.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Prizes may be chosen by the winner, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, of artistic design, suitably engraved.



Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. *No more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Remember that subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.* Prints on rough or linen-finish surface and sepias are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. All prints should be mounted on stiff boards.

3. *Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data.*

4. *Each print entered must bear the maker's name and address, the title of the picture and name and month of competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for a 2-cent stamp. Be sure to state on the back of every print exactly for what competition it is intended.*

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, this does not prevent the photographer from disposing of other prints from such negatives after he shall have received official recognition.

6. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins; but in every case, prints should be protected by strong, stiff boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

7. Competitors who have won three first prizes within a twelve-month, become ineligible for two years thereafter. The too frequent capture of the first prize by one and the same competitor tends to discourage other participants and to make the competitions appear one-sided and monotonous.

Awards—Summer-Flowers

Closed July 31, 1921

First Prize: Taizo Kato.

Second Prize: John Dove.

Third Prize: Charles Lederle.

Honorable Mention: J. E. Carson, Clarence R. Carter, F. H. Chant, Ralph D. Hartman, Mrs. A. O. Hildebrand, W. Little, Alexander Murray, Harold B. Neal, Walter E. Paul, E. H. Skinner, John Smith, Kenneth D. Smith, W. Stelcik, W. H. Waite.

Subjects for Competition—1921

"Winter-Sports." Closes January 31.

"Home-Portraits." Closes February 28.

"Copying Works of Art." Closes March 31.

(Paintings and Statuary.)

"Home-Scenes" (Interior). Closes April 30.

"Street-Scenes." Closes May 31.

"Summer-Sports." Closes June 30.

"Summer-Flowers." Closes July 31.

"Marines." Closes August 31.

"Outdoor-Genres." Closes September 30.

"Architectural Subjects." Closes October 31.

"Domestic Pets." Closes November 30.

"Indoor-Genres." Closes December 31.



Photo-Era Prize-Cup

In deference to the wishes of prize-winners, the Publisher will give them the choice of photographic supplies to the full amount of the First Prize (\$10.00), or a solid silver cup, of artistic and original design, suitably inscribed, as shown in the accompanying illustration.

Competitors Should Mind the Rules

COMPETITORS, in the Advanced Workers' and Beginners' Competitions, are inclined to ignore some of the rules, one of which is that the name and address of sender, also name, month and kind of competition must be written plainly on the back of each print. Otherwise, how is the jury to know?

This is often the reason why careless entrants wonder what has become of their prints. Let them be more careful in the future. We will do our part, gladly.

We are eager to make these competitions of practical value and benefit to every entrant. However, to serve each one to the best of our ability, we must have the necessary information.



THE YUCCA

TAIZO KATO

FIRST PRIZE—SUMMER-FLOWERS

Lighting and Exposure in Autochrome Work

THE beginner in color-photography by the Autochrome process will not work very long without finding out how very important it is to give the correct exposure for each plate, says a writer in *The British Journal*. Autochrome plates of necessity have a very thin film and consequently very little latitude in exposure. Correctness in this respect is of far greater importance than in any other branch of photography, since a slight error of a degree that would make but very little difference in the production of a good monochrome negative may be sufficient to cause the loss of the transparency in Autochrome work.

An exposure-meter should always be used, preferably one of the Watkins or Wynne pattern, with a special dial adjusted to suit the needs of Autochromes, and the photographer should aim at great exactitude both in testing the actinic value of the light and also

in giving the exposure indicated. One of the peculiarities of the Autochrome plate is that in sunlight it gives a better color-rendering of the subject with very slight underexposure, which saves the "burnt-out" or weak colors that are often in evidence with Autochromes made in brilliant sunshine. When the light is weak, however, slight overexposure will be necessary to produce correct contrasts. The meter makes a proper guide in this direction, and its reading should always be adhered to.

Some photographers I have met were under the belief that it is only possible to make good Autochrome pictures when bright sunlight is falling upon the subject; but experience has taught me that this is far from being the case; in fact, some of the best plates that I have ever made were exposed in dull light. Also, a dull lighting tends to remove troubles from over-strong contrasts in the lighting of the subject, since a dull or diffused light will be found to illuminate more evenly



ICELAND POPPIES

JOHN DOVE

both shadows and highlights. It must be kept in mind, however, that a dull light tends to soften the colors of the composition; but though this may be the case, the general effect, the delicate nuances and aerial perspective will be far better in their rendering, and possibly a dull light is what the pictorial color-photographer will choose.

One fact must be kept in mind in connection with this. The Autochrome plate demands considerably more exposure between dull and bright light than is the case with ordinary plates; or, in other words, it is slower in dull light than under conditions of sunshine. This fact must be kept fully in mind when exposures are being made indoors; in fact, Messrs. Burroughs, Wellcome and Co., in their list of plate speeds issued for use with their "exposure calculator," give an indoor factor of 24, against an outdoor factor of 12 for Autochromes. From this it may be seen that too much attention cannot be given to exposure when using Autochrome plates. It is well worth the time and effort involved.

Underexposure is fatal, since there is no cure for it; and this, in my experience, is the mistake usually made by beginners, and to which most of the failures in Auto-

chrome work may be traced; and when the worker is in any doubt, more, rather than less, exposure should be given. An overexposed plate will, of course, produce a thin transparency, weak in colors, though these may nearly always be restored by intensification. Some Autochrome workers always overexpose their plates, and rely upon intensification to bring the pictures up to the requisite quality. In my own experience, this is the only course when extremes of lighting compose the illumination of the subject.

Many workers who use Autochrome plates are not perhaps aware that backing the plate with the white instead of the black side of the protecting card when in the plateholder reduces the exposure very slightly, an advantage when these slow plates are being exposed upon animals or objects likely to move. I cannot say that I have tried this myself, so the exact extent that the exposure is decreased I cannot say from personal experience; and other workers with whom I have discussed the point seem more or less in doubt on the question. Dr. Lindsay Johnson, in his book "Photography in Colors," says the white card in contact with the film reduces the exposure to about three-fifths



WILD CARROTS

CHARLES LEDERLE

A Reliable Intensifier

ALTHOUGH the usual mercuric chloride bleach intensifier, followed by darkening in either ammonia or sodium sulphite, has wide popularity among photographers, there are times when—either from the extremely poisonous nature of the mercury bath, or from the fact that negatives intensified in this way cannot be regarded as being anything like permanent—a reliable intensifier, giving absolutely permanent negatives, is required.

The method consists simply in making use of the ordinary ferrieyanide-bromide bleach and sodium-sulphide sepia toning-bath for intensifying negatives. Provided the negative has been thoroughly fixed and washed, and the sulphide bath *freshly made up*, it will darken to a rich, black image with identically the same degree of intensification as that given by the bichloride of mercury intensifier. It is very important that the sulphide should be obtained from a reliable source, and also that the solution—(normal strength)—should be freshly made up. A stale sulphide bath, or impure sulphide, will produce an image of a weak yellow-brown color, with very serious loss of quality. In order that the bleaching may not take an unnecessarily long time, it is a good plan to make up the ferrieyanide and bromide bleaching-bath a little stronger than is required

to tone prints. It goes without saying that, provided the negative is bleached right through, thoroughly darkened and properly washed, the results, after intensifying, may be regarded as being absolutely permanent. I claim no originality for this method, but it is not so well known as it might be. I therefore trust that fellow-photographers will find it useful in their work.

A. J. SWEENEY, in *The British Journal*.

Straightening Stiff Warped Mounts

THE warping of mounted prints, especially those of large size, can be quickly and permanently cured by the following procedure: After mounting let the print dry naturally over night, which will cause it to curve inward; hold it with the print side upward a few inches over a gas or spirit heater, moving it to and fro horizontally. When the mount has become uniformly warm, remove it from the heat and it can be bent in the opposite direction without danger; hold it in this position till it has become cold again. The heat and the slight moisture still retained by the paste softens the fibers, and the stretching while cooling tends to keep the mount flat. It is a good plan to keep the picture under pressure for a time.—*Photographische Industrie*.



SUBJECT FOR NEXT COMPETITION ADVANCED WORKERS



A KISS IN HONOR, NO ONE CAN DENY

KÄTE HECHT

EXAMPLE OF INTERPRETATION

Advanced Competition—Domestic Pets Closes November 30, 1921

Of all our competitions none appears to be more popular than the one devoted to Domestic Pets. Each year, this interest seems to increase. The camerist may admire handsome buildings, revel in the ever-changing moods of the sea and devote his time to the marvels of photo-micrography; but when it comes to his pets—there is heart-interest! One outstanding feature about the photography of pets is that it is based on attachment and not solely on pictorial interest. The photographic portrayal of that which is dear to the photographer usually calls forth his best artistic and technical skill. It matters little whether the pet is a canary, turtle, goldfish, rabbit, parrot, cat, dog, calf, colt or chicken—there is no question that it fills its own niche in the hearts of the household. There are persons that belittle the affection and care bestowed upon pets; but give me the man who can win a dog's devotion in preference to one who cannot.

It is a comparatively simple matter to photograph a pet, if no attention be paid to the composition or appeal of the picture. At the outset, it will be well for contestants to remember that this competition does

not call for *record-photographs* of domestic pets. There must be an appeal, and it must not be artificial. Do not attempt to dress up pets in all manner of grotesque costumes, or induce them to simulate some human act like smoking a pipe, being ill in bed, etc. Such pictures do not express the purpose of this competition. Let us have our pets as we know them, free of all artificiality. However, with regard to commercial pictures made to appeal to the general public, pets may be dressed up and induced to perform strange antics.

It does not follow that the Domestic-Pets competition must be confined to those usually kept in the house; it may include pets kept on the farm or estate. However, such animals must be *pets*, not merely domesticated animals. An intelligent horse may become just as great a pet as a cat or a dog. Even raccoons, foxes and pheasants have been known to become great pets. In short—any animal, bird or reptile or fish that has been made a pet, is eligible to have its picture sent to this competition. However, remember that such pictures must make an appeal to the beholder, and not represent merely a commercial record. Particular emphasis should be placed on some little trick or habit that is out of the ordinary.

If unusual combinations of animals are unobtainable, a pet—such as a raccoon, cub-bear, fox or deer—offers excellent opportunities to the intelligent camerist. The very fact that these animals are more often wild than tame, is an entreaty that few can resist. Although the animals hold the interest of themselves, it is just as important as ever to use care with regard to pictorial composition. Try to avoid a background of clapboards, shingles, bricks, picket-fences and other vertical and horizontal lines. A clump of bushes, a flower-bed, a wheat-field may be utilised to advantage.

There is one important point to be taken into consideration. Some persons are better adapted than others to manage animals successfully. Unless the camerist can make friends with the pet to be photographed, his chances of success are reduced to a minimum. No animal will act or appear natural, if it is frightened or distrustful. Sometimes, personality alone is responsible for the restiveness of pets; and, whenever this is found to be the case, the camerist had better seek other subjects. I do not mean to imply that the camerist's personality is repellent, but rather that his physical or mental characteristics are such as to arouse fear or suspicion. Some of the most refined and likable people have an aversion to cats and dogs; and, usually, the cats and dogs reciprocate heartily. Fortunately, in most cases there is harmony, and the camerist can devote his entire attention to his willing, although somewhat unruly, subject.

Without a doubt, the reflecting-camera is best suited to the photography of domestic pets. The invaluable advantage of being able to watch the subject up to the moment of exposure enables the photographer to obtain the best and most natural results. Of course, other types of cameras may be used successfully. I do not mean to imply that they cannot be used; however, the fact remains that the reflecting-camera is the best adapted to the subjects under discussion. Next in utility are those cameras that are equipped with a groundglass focusing-back. These permit the camerist to focus accurately and to compose the background; but with regard to catching the psychological moment—that is out of the question; for by the time the plateholder is inserted, the subject's position is apt to change. In using a camera of this type, the most satisfactory method is to focus and compose the background, then insert the filled plateholder, remove the slide, and with the wire-release or bulb in hand await the desired position of the subject. Roll-film cameras and other types that have no groundglass focusing-back must be focused on a given point as accurately as possible by scale, and the subject must be placed at this point in order to register sharply at the moment of exposure. A direct-view finder is of great assistance although, obviously, it cannot have control over the focus. To sum up the question of cameras suited to domestic-pet photography, there is no question that the reflecting-camera is supreme. However, other cameras may be used successfully, provided that the focus, exposure and composition are carefully co-ordinated. Perhaps, the greatest asset of all is technical and artistic ingenuity. By that I mean the ability to meet the unexpected problems that arise inevitably in this branch of photography. There are all kinds of little expedients that may be used to gain a point, and the intelligent camerist should be alive to each and every one of them. Only by quick thinking and alertness can success be achieved.

A number of times, I have been amazed at the exceptional opportunities that confront owners of several pets. In this connection I am led to repeat an experience I had last summer, one that has been duplicated many times. During an afternoon's walk in the moun-

tains, I called at a delightful old farm and, in looking for the owner of the place, walked around toward the barn. It was late in the afternoon and the sun was shining comfortably on a sort of loading-platform from which hay, grain and produce were transferred to wagons. On this platform—sunning themselves and, evidently, on the best possible terms—were two beautiful Angora cats, a collie, a peacock, three or four geese and several hens. Just then the man of the house came around the corner, and I pointed out what seemed to me to be a very unusual state of affairs. He laughed and said that he had become so used to seeing these animals and birds together, that he did not even notice them now. I suggested that he might make a few pictures and sell them to advantage. Again he laughed. "What do I know about a camera?" remarked he. I attempted to explain that he needed very little photographic knowledge to make some excellent pictures of a subject that many camerists would travel miles to find. It was of no use, and I imagine that there is an abundance of rich subject-material going to waste because of indifference to the possibilities of the camera. If this man could have realised the opportunities literally staring him in the face, he could have made a few extra dollars and also enjoyed his pets the more. Although my friend failed to grasp the value of a camera to him and to his pets, it was not due to any lack of love for them. There are few farms where virtually every animal and bird is such a pet, and so well taken care of, as on this farm. The latent artistic and photographic instinct could not be aroused; but I hope that some day it may be, and then the rest of us will see pictures.

The ideal method to photograph pets is the one with which the camerist waits for the subject to assume a *natural pose in natural surroundings*. Many camerists attempt to use force. By that I mean that they pick up a kitten or puppy, take it out of doors in the sun, try to make it look cunning, and end the farce by obtaining a picture that has no merit other than that possessed by a record-picture. In the case of my friend, the farmer—had he been making pictures—each animal and bird was at rest and in an entirely familiar environment, hence natural. Suppose that he had decided to photograph the cats, dog, peacock, geese and hens at the front instead of at the back of the barn. One may imagine the difficulties that he would have had. However, his doing so would be no more absurd than the attempts that some camerists make to force things; and let me assure the reader that from actual experience I contend that no successful domestic-pet picture can be made, unless the subject is natural, unafraid and in its natural environment. After all, these requirements ensure the truthfulness of the picture and are the factors in its technical and artistic make-up that cause it to appeal to the beholder. In short, it rings true; and that is what every picture that we make should do.

Inasmuch as the Editors of PHOTO-ERA MAGAZINE are lovers of pets and have had many of them, it may be said that interest in this competition is keen among all those concerned. We appreciate the difficulties that must be surmounted and the infinite patience that is often required to obtain a result that is apparently very simple. There is a common bond between all lovers of animals and bird-life; and this, added to our mutual interest in photography should make this competition more popular than ever for those that send prints, for those that judge them and, finally, for those that see the prize-winning pictures in PHOTO-ERA MAGAZINE. Let this be a mutually enjoyable and profitable competition.

A. H. B.



BEGINNERS' COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U. S. A.

Prizes

First Prize: Value, \$2.50.

Second Prize: Value, \$1.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Subject for each contest is "*Miscellaneous*"; but original themes are preferred.

Prizes, chosen by the winner, will be awarded in photographic materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

Rules

1. This competition is open only to beginners of not more than *two* years' practical camera-activity, and whose work submitted here, is *without any practical help from friend or professional expert*. A signed statement to this effect should accompany the data.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints from $2\frac{1}{4} \times 3\frac{1}{4}$ to and including $3\frac{1}{4} \times 5\frac{1}{2}$ inches, and enlargements up to and including 8×10 inches.

4. Prints representing *no more than two different subjects*, for any one competition, and printed in any medium except blue-print, may be entered. They should be simply and tastefully mounted. *Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.* Prints on rough or linen-finish surface paper and sepias are not suitable for reproduction, and should be accompanied by smooth prints that have the same gradations and detail.

5. *Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data. Criticism at request.*

6. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, he may dispose of other prints from such negatives after he shall have received official recognition.

7. *Each print entered must bear the maker's name, address, instructions, the title of the picture and the name and month of the competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type, and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for 2-cent stamp. Be sure to state on the back of every print for what contest it is intended.*

8. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins, but in every case, prints should be protected by strong, stiff boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid)

Awards—Beginners' Competition

Closed July 31, 1921

First Prize: Fred Bennett.

Second Prize: M. J. Burelbach.

Honorable Mention: Malcolm W. Jones.

Who is Responsible?

For some reason that has never been explained to my satisfaction, many amateur-photographers return from their summer-vacations, wrap up their cameras and put them away for the winter. Some of them act as if there were a definite open and closed season for the camerist, as there is for the hunter or fisherman. With the beautiful autumn-days to come, will someone please explain why it is not possible to use the camera with as much pleasure as during the summer-days? Then, again, when snow flies, is there any law to prevent the camerist from making pictures? Who is responsible for the attempt to limit the use of a camera to certain seasons of the year?

Perhaps, there are some beginners who will raise the objection that the weather is too cold, too wet or too something, and that, after all, there are few good subjects to be found in autumn and winter. Right here, let me state with all possible emphasis that photography is an all-the-year-around pastime or business. There are no seasonal limitations to its enjoyment. The reader may say to himself, "This is all very well; but who is going out on a cold, stormy day to make pictures?" Let me be misunderstood, let me say that I do not advise any such procedure; but I do wish to call attention to the opportunities that lie at hand on one of those clear, cool days of autumn when the landscape is defined sharply and the sun shines with summer-time brilliancy.

Let us suppose that weather-conditions are really impossible and that the camerist is compelled to remain indoors. Is his photographic work to stop? Not at all. Think of the opportunities to make still-life pictures, indoor-genres of the family, studies of pets, flashlights, and to experiment with enlargements, lantern-slides, developers, the coloring of prints and a host of interesting branches of photography for which there has been neither time nor inclination during the summer. Really, the autumn and winter are seasons of photographic opportunity as important and profitable as the summer vacation-days.

Another opportunity presents itself to the ambitious camerist during the so-called dull months of the year. It is a time for the careful study of photographic literature in the form of standard works by authors of reputation and the perusal, at leisure, of the best pictures and articles that have appeared in the photographic magazines. Again, the reader may object with the remark, "I am not sufficiently interested to devote all this time and trouble to photography." Let me say that any camerist who is only a fair-weather snaphooter is really not entitled to be called an amateur-photographer. PHOTO-ERA MAGAZINE aims to encourage every user of a camera to dignify the term, "amateur photographer." The intelligent camerist



THE SUN-MAID

FRED BENNETT

FIRST PRIZE—BEGINNERS' COMPETITION

soon learns the difference between a snapshooter and a real amateur-photographer. The former usually has little to show for his photographic effort; but the latter is happy in the satisfaction of having done something worthwhile. The camerist who is really eager to make the most of photography will find a tremendous amount of pleasure and profit in an hour or two spent with a well-written photographic textbook.

Indeed, to assume that the camera and all interest in photography should cease the moment that vacation-days are over is to deny one's self many hours of wholesome pleasure and often substantial financial returns. Let me give a case in point. A college-student spent his summer-vacation in a particularly beautiful spot in the mountains. It so happened that there were no good postcards of this charming region despite a steady demand from motorists who passed through it. The student grasped the opportunity. He devoted the greater part of his vacation to making pictures of every beauty-spot in that entire region. The following winter he spent a few evenings each week making postcards from the negatives. The next summer he placed the postcards in all the leading hotels and stores of the mountain-resort with the result that he developed a profitable little postcard-business that enabled him to take additional courses at the university and to be graduated better prepared for the engineering-career he had chosen. He did not relegate his camera to the top shelf, nor did he stop his photographic work during the autumn and winter. He proved that camera-work may be done every month in the year.

The point of this little article is to help the beginner, and all camerists, to realise that interest in photography may be maintained from one year's end to the other with increasing pleasure and profit. It does not mean that the camerist should seek pictures in a howling storm; but it does mean that he may enjoy some branch of photography indoors or outdoors, summer and winter, and that there are no open and closed seasons for the owner of a camera.

Why Not a Photographic Reading-Course?

WE are often reminded of the value of a systematic reading-course in history, art, economics, literature, advertising, mechanics and other subjects. However, it has never been my experience to have any institution of learning advise or prepare an interesting, profitable reading-course in photography. Surely there are many beginners and even professional photographers who would enjoy such a course of at-home reading. The subject of pictorial composition is of much interest and value. Moreover, it is educational in the sense that it will enable the reader to obtain an appreciation of the work of eminent painters and photographers. Surely it is worth while to know of the work of such men as Corot, Gainsborough, Raphael and others who have left their impress on modern photographic art. Then again, is it not worth while to know something of the evolution of photographic lenses and the names and uses of the various types now employed by the leading workers?

A. H. B.



ASSEMBLY

W. J. BURELBACH

SECOND PRIZE—BEGINNERS' COMPETITION

Clouds as They Are

THOSE who visit modern photographic exhibitions with a view to an intelligent study of the work on view cannot do so without being forcibly struck with a lack of observation of effects seen in Nature on the part of prominent photographers. In this connection, we refer to the introduction of clouds into landscapes, which is one of the points at which many workers go wrong. A British cotemporary goes on to say that when introducing clouds in a photograph it is not only important that the clouds should be in keeping with the landscape-portion of the picture with regard to lighting; but the scale of the individual clouds should also be in harmony. In many pictorial photographs that we have seen in the past, this point has been neglected altogether; in one instance, a single large cumulus cloud occupied the whole sky-portion of the picture, and the rest of the composition included a very large area of distant landscape. Such an effect in Nature would never have been seen, and whatever value the picture might have gained from the Art point of view is therefore discounted. A fact that does not seem to strike many workers is that a sky need not necessarily contain clouds. Not that the sky-portion of a print should be an expanse of white paper; but a sky of luminous tonal quality is often far more expressive of truth than is the over-assertive sky often introduced by photographers. Observation of Nature will readily prove that clouds do not pile themselves up in overpowering masses over a sunny landscape. The keen observer of Nature will learn many things of great practical and artistic photographic value, if he will do so.

Cooling the Solution

A WRITER in *The British Journal* offers a good suggestion with regard to cooling photographic solutions. During very hot weather various troubles, such as flatness of the image, softening of the film and overdevelopment are likely to arise if the temperature of the solution in the developing-tank is allowed to rise much above 70 deg. Fahr. It is, however, quite easy to cool the solution without removing it from its receptacle by sinking in it a bottle filled with broken ice and water, and leaving it until the necessary reduction of temperature is made. Care must be taken to keep the solution stirred, either with a stick or with the bottle itself, so that the cooling is not localised, and a thermometer should, of course, always be used. The colder mixture of ice and salt has been recommended, but if this be used it is necessary that none of the solution escapes into the tank. Conversely, the developer may be warmed in winter by using hot water in the bottle instead of cold, but in this case it is necessary to use well-tempered glass or, better, stoneware, a ginger-beer bottle answering very well. Metal cans or bottles may be used, but are likely to contaminate the solution unless quite free of rust or corrosion.

A Touching Incident

SHE met him in a darkened room.

Said he, "I've brought some roses."

She answered with irrelevance,

"Oh, dear! how cold your nose is!"

Exchange.



THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



Keeping-Qualities of Developers

ACCORDING to Mr. L. P. Clerc in *The British Journal*, another French chemist, M. J. Desalme, who has previously made several contributions to the subject of developers and development, has published a process which he has had in use since 1912 for preventing the oxidation of the ordinary developers, which can be used until the accumulation of bromide in the course of development renders them too slow in action. M. Desalme, after a systematic study of many reducing-substances able to regenerate the developer from its products of oxidation without acting either on the latent image or the unaffected silver-bromide, and also capable of addition—without precipitation—to developers containing sulphite and alkaline carbonates, has made choice of a double soda-stannous tartrate, which he prepares as follows:—Dissolve 10 gms. crystallised stannous chloride and 15 gms. powdered tartaric acid in 50 to 80 c.c.s. of boiling water. After cooling to nearly the ordinary temperature, pour this solution slowly and with constant stirring into a cold solution of 25 gms. dry soda carbonate in 250 c.c.s. of water. Make up to 400 c.c.s., let stand for at least 12 hours and filter. This solution is used in conjunction with alkaline developers by adding about 40 c.c.s. to each 1,000 c.c.s. of the working developer. In using it with developers, such as diamidophenol, not suitable to the employment of a strongly alkaline salt, the stannous-tartrate solution is first neutralised or very slightly acidified by addition of sodium bisulphite up to a point at which the mixture, after thorough stirring, slightly renders red the blue litmus paper. I have been able to keep diamidophenol developer "preserved" in this manner in good condition for over a week in an open vessel, whereas similar but unpreserved developer was useless within less than an hour. Although the stannous-tartrate compound decolorises many dyes, it has no action on safranin, and it does not interfere in any way with the desensitising powers of these dyes.

My experiments with alkaline developers, other than a special developer (quinol and paramidophenol) commended by Mr. Desalme, have not had success.

Safranin in Developers

IN the current issue of *Photographische Industrie*, Dr. Lüppo-Cramer gives two further formulae for developers that contain safranin, and thus serve for development by bright yellow light owing to their desensitising action. The first developer of this form, viz., paramidophenol, is made up by dissolving 50 gms. potass. metabisulphite, 20 gms. paramidophenol hydrochloride and 4 gms. potass. bromide in 125 c.c.s. of water. To this is added with the customary precautions a solution made by dissolving 70 gms. pure caustic potash in 90 c.c.s. of water. Much heat is developed in dissolving the potash and the solution must first be cooled before adding to the first. To each 200 c.c.s. of the mixture, 10 c.c.s. of 1:100 pheno-safranin solution is added. The dye is precipitated, forming a turbid mixture. The latter, therefore, requires to be well shaken when making up the working developer by mixing with about twenty times its bulk

of water. For a glycin-safranin developer 50 gms. of potass. metabisulphite and 30 gms. of glycin are first mixed together in a good-sized vessel. Potass. carbonate (300 gms.) is then added and addition made in small doses of 180 c.c.s. of water. In this way a thin creamy mixture is obtained of bulk about 250 c.c.s., to which is added 25 c.c.s. of 1:100 safranin solution. In this case also the dye is precipitated; but redissolves on dilution of the cream, to form the working developer, with 10 to 15 parts of water. If the glycin-developer is to be used at a greater dilution for slow development the proportion of pheno-safranin should be correspondingly increased.—*The British Journal*.

Exposures and Panchromatic Plates

MANY photographers when using panchromatic plates for the first time fail to get the finest possible results through overlooking the fact that these plates demand a full exposure if their highest qualities in the matter of color-rendering are to be obtained; particularly, when the subject is composed of great extremes of light and shade. It is sometimes imagined, says a British cotemporary, that anything like overexposure tends to give the snowy effect, very much like over-correction, that is sometimes found upon photographs made upon these plates. But this is quite a mistaken idea; for the defect referred to is far more likely to be caused by underexposure, coupled with overdevelopment. For exposures to be always accurate an exposure-meter should be consulted, and no harm will be done if double the indicated time is given. An experience of the Paget color-process confirms our belief that the best color-renderings upon panchromatic plates will be obtained upon very dully-exposed negatives, together with a development stopped well before the image gains great density. If any photographer who has not been so successful as he desired with panchromatic plates will try the experiment of exposing by meter and developing with one of the modern single-solution concentrated developers, by the time and temperature system, using a factor for soft contrast, and thereby standardises his working-conditions, we venture to predict that a very much better technical standard of results will be achieved.

Combined Development and Fixing

A FRENCH chemist, M. L. J. Buncel, living in Italy, whose name is well known in connection with uranium-toning, has recently worked out a formula for simultaneous development and fixing which, I think, is the first step towards a really satisfactory form of this process, says Mr. L. P. Clerc in *The British Journal*. It employs chemicals in common use, and is readily compounded. As with previous processes of this kind, it is necessary that the exposures should be ample, otherwise fixing is completed before development.

Soda sulphite, dry.....	30 gms.
Diamidophenol (hydrochloride)	5 gms.
Hypo.....	50 gms.
Acetone.....	80 ccs.
Water to make.....	1,000 ccs.



OUR CONTRIBUTING CRITICS



YOUR CRITICISM IS INVITED

Whoever sends the best criticism (not over 150 words) before the last day of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

THE distribution of light and shade in the picture is confusing. The light in the upper-right corner, in particular, could be toned down or perhaps trimmed off, to advantage; for the tree-branch cutting across the corner parallel to one of similar tone below is not conducive to harmony in the whole. The middle distance does not seem to explain itself very satisfactorily; the highlight at the extreme left is distracting; and it is obvious that the black patch above has nothing to do with the picture and should have been eliminated. Exposure was apparently ample and the resulting light-gray tone, as shown in the reproduction, is pleasing. Another viewpoint might have given a more harmonious distribution of the light and shade and thus established a better balance in the composition.

RAYMOND E. HANSON.

THERE may be some beauty in this picture, after all—if one could but see it. But why all the mystery? The subject is not one to call for so dim and soft a focus. In the composition there is, from top to bottom, the ever-faulty division into three equal parts of sky, land and water. And across the picture we have almost a compensating lack of balance, for there is nothing at the left of the picture to "support" the trees at the right which seem to be falling over each other every which way. So that altogether, from the very black spot in the upper-left corner, to the dark one in the lower-right corner—effect, note, by very different causes—there is very little in the picture to commend.

Y. BILLY RUBIN.

THERE may be numerous faults in this print, and it may have been taken too hurriedly to have chosen the better viewpoint; still, there is a something about it that is attractive, and the exposure was nearly correct, the contrasts not being too excessive. Trim an inch from the top, half an inch from the left side and



THE PICTURE CRITICISED THIS MONTH

three-eighths from right side, you will have quite a passable picture left, trimming having removed most of the faults. The reflections are pretty and the tone good; the small strip of sky will balance the rather dark lower-right corner. The print would have been better if the creek was not in straight line, which leads the eye away from the prettier part of print. I am no judge; but I have seen many prints that looked to me to be far worse than this.

J. E. CARSON.

The picture this month is evidently an impromptu attempt at a landscape in autumn. We will give its author credit inasmuch as the barren trees in the foreground give the subject a desirable atmosphere. But the foreground and its many crossing lines confuse us beyond measure. There is nothing pleasing about the pattern, and the tree on the extreme right has no visible support. The eye objects to being led by the stream straight to the haze of the background and dropped right in the center. It should have curved gracefully to the left. This could have been accomplished by selecting a viewpoint on the bank at the right. An improvement can be made, however, by trimming off one inch from the left side of the picture, thus eliminating the light-struck upper corner and moving the stream to the left. The picture would still lack balance, to say nothing of the slight under-exposure.

ARTHUR J. HESSINGER.



ALTHOUGH our contributing critics have stated the flaws of the brook-scene, and how the picture could be improved, they did not explain the cause of the dark-

ened upper corners. This fault is due to the field being placed beyond the circle of illumination of which the lens is capable, the rising-front (carrying the lens) being raised too much, so that the upper corners extend into the dark area beyond the circle of illumination. Remedy: a careful inspection of the groundglass image before making the exposure, and a proper adjustment of the lens-front.—EDITOR.



Light-Distance and Exposure

A POINT which is commonly overlooked in making portraits by artificial light is the effect upon the time of exposure of altering the distance between the light and the sitter. The photographer who has only been accustomed to daylight-work does not realise that by moving the sitter three or four feet to obtain a certain effect of light he may be doubling or halving his working light. The ordinary rule that the intensity of light is in inverse ratio to the square of the distance between the source of light and the object it falls upon is strictly correct only in the case of an illuminant of very small area; but it will not be far wrong if applied to ordinary portrait-work. To give a simple example, says *The British Journal*, we will suppose that at a distance of six feet from the light an exposure of two seconds is sufficient; at eight feet six inches four seconds will be necessary to give an equally exposed negative. This principle has also an important bearing upon the exposure of full-length figures, in which the difference of distance from the light between the head and the feet may be four or five feet in such a case. The head at four feet from the light will receive four times as much light as the boots which are, let us say, eight feet away.



OUR ILLUSTRATIONS

WILFRED A. FRENCH



IN picking up the current issue, the first picture that meets the eye proclaims a windmill on a hill, the work of a pictorialist quietly active in a town situated at the northern extremity of Mt. Greylock, the monarch of the Berkshires. The view suggests a European origin—Holland, maybe; but no, the scene is on the island of Nantucket, to the south of Cape Cod. Notice the somber, rugged approach to the summit guarded by the solitary sentinel standing out against the evening-sky. The whole picture is filled with mystery, with poetry and song. It is a dramatic story of Nantucket. The meager data declare a 5 x 7 camera; 8-inch R.R. lens used at F/16; Stanley plate; pyro; enl. on Artura Carbon Black.

Mrs. Cassidy's interpretation of cotton, ready to be picked, evinces a thoroughly refined and sensitive nature—responsive to the appeal of simple beauty. The graceful and modestly balanced design and delightfully artistic treatment of the subject are matters of our sincerest admiration.

Data: Made indoors; Nov., 2 P.M.; sunlight; 5 x 7 Graflex; 8¼-inch Dagor; at F/16; 4 seconds; enlarged with P. & S. Semi-Achromatic lens, on rough bromide paper.

The Editor's unpleasant experience related in the July, 1921, issue—of witnessing an alleged portrayal of the scenic wonders of the Glacier National Park which were obscured by extraneous and absurd diversions—becomes a mental blank as he yields to the appeal of Mr. McCowan's pictures of the Rocky Mountains Park of Canada which accompany the artist's article of the same name. In many instances, Mr. McCowan has included in the view an attractive foreground which adds to the topographical interest of the picture, although the result may not be strictly in accordance with the rules of pictorial composition. The general effect is impressive, radiant, and fills the soul with gladness.

No less enthusiastic an admirer of Canada's wild mountain-scenery is J. K. Hodges, whose portrayal of Mt. Cascade, page 172, displays sympathetic interpretation.

Data: 3A Kodak (3¼ x 5½); Kodak Anastigmat F/7.7; stop, F/7.7; October, 2 P.M.; cloudy; 1/25 second; roll-film; M. Q.; Cyko print.

The spectacular marine, by E. M. Barker, is a well-ordered composition, thoughtfully planned and successfully executed. It serves to illustrate the artist's versatility in the choice of subjects, his previous contributions to these pages having been of the landscape class, and exceptionally attractive. The tender beauty of his two waterfalls—pages 178 and 179—is due, in a measure, to the perfect quality of the negatives, the production of which he generously explains in his essay.

Data: "Hampton Roads"—July, 6.30 P.M., from the pier at Fortress Monroe; camera and lens as given below; F/64; Eastman cut portrait-film mounted on black cardboard; pyro; 1/25 second; enlarged on No. 5 P. M. C. Bromide paper. "Falls near Patapsco River"—August, 2.30 P.M.; fair light; 4D Eastman camera (4 x 5); 5½ inch Dallmeyer; at F/16; 1/5 second; Stanley plate; pyro; P. M. C. Bromide enlargement. "The Trout-Brook"—August, 1.30 P.M.; fair

light; same camera and lens; stop, F/32; same plate, developer and print.

For data of "Sentinels," by Theodore Eitel, page 187, I must refer the interested reader to the artist's admirable essay on the photography of trees and wood-interiors, published with a number of superb pictures by Mr. Eitel in PHOTO-ERA of September, 1910. Camerists who desire to specialise in this fascinating branch of outdoor-work, will find this article eminently helpful and inspiring.

Data to Stockton Veazey's pictures: "Boys with Goat," page 188, 4 x 5 Auto Graflex; 6-inch Ic Tessar; 26x Seed plate; pyro, tank. "Jumping Dog," page 189; same as preceding. "Captain on Bridge," page 190, No. 3 Kodak (3¼ x 4¼) 5-inch IIb Tessar; Eastman roll-film; pyro, tank.

The beautiful effect of a multiple-row of white birches illuminated by the late-afternoon sun, has been referred to editorially on page 193. The immediate foreground is low in tone, as it should be, to give the picture something solid to rest on. This feature in pictorial composition is always a matter of serious concern with Mr. Hanson.

Data: June, 6.30 P.M.; bright sunlight; 3¼ x 4¼ Graflex; 6½-inch P. & S. soft-focus lens; at F/8; 3-time color-screen; 1 second; Orthonon plate; pyro; enlarged on Artura Carbon Black E Smooth.

Advanced Workers' Competition

IN accepting summer-flowers as subjects of pictorial interpretation, the inexperienced worker in this delightful realm of photographic activity took a big "mouthful." He did not seem to appreciate the difficulties that would arise when it came to obtain an artistic arrangement of the many objects which looked so beautiful, so appealing, in their colored raiment. They did not appear to understand that however satisfying a group of flowers appeared to the eye, when translated into black and white—a photographic print—the result would be disappointing, unless artistic judgment had been shown in the choice of illumination out of doors, and in the management or control of the illumination indoors. It is too long a subject to treat here. Suffice it to say that to obtain an harmonious and well-balanced design in photographing flowers requires special skill, and many delightfully successful pictures of flowers—not singly, but as a group—have graced the pages of this magazine during the past eighteen years. Record-photographs of flowering bushes were entered in the July (Summer-Flowers) competition in great numbers, also groups of different species, in vases or jars, that showed no vestige of design or graceful arrangement. Like all our competitions, the present one was announced long in advance to enable participants to study this branch of work and to prepare for it. But it appears that many of them underestimated its difficulties, and treated it lightly. But then, not every camerist has the natural aptitude, the sensitive, sympathetic nature of an Alexander, a Davis, or a Decker, whose fitting personality is reflected in the flower-pieces that have embellished PHOTO-ERA's pages from time to time.

Flower-photography is a specialty, and, perhaps, the Editors expected too much from the competitors, as a whole.

When it is in bloom, the Yucca dominates the desert-landscape of Eastern California by its array of white blossoms. This slender, graceful plant attains a height of from fifteen to twenty feet, as pictured by Taizo Kato on page 195. A pair of Yuccas is placed, by the artist, with admirable judgment in spacing, affording the eye easy access to the rest of the landscape. At the left, another Yucca is visible, and, farther away, between the dominating two, still another. The high key of the ensemble is very appropriate and avoids any tendency to harshness. The plastic effect produced by the twin-pair of Yuccas relieved against a diffused background, attained by legitimate means, is very pleasing.

Data: June, 2 P.M.; bright; 5x7 Cycle Graphic; 8 $\frac{3}{4}$ -inch Verito; stop, F/4; 1/35 second; Standard Ortho-ton; pyro; ray-filter; enlarged on Artura Carbon Black Grade D.

No one can resist the appeal of Mr. Dove's "Ice-land Poppies," page 196. There is scarcely a straight line in the unobtrusive array of graceful stems bearing two fully developed flowers and several young buds. The group has yielded a beautiful design. The lighting has been managed with admirable skill, so that character by gradations may impart variety and distinction to the picture. Data: Indoors, May 20, 1921; 11.30 A.M.; good window-light; 7 $\frac{1}{2}$ -inch R. R. lens; stop, U. S. 32; 3-time color-screen; 5 minutes; Ortho-ton plate; Rytol; Azo print.

"Wild Carrots," popularly known as "Queen Anne's Lace," is Mr. Lederle's successful offering, page 197. It is a very difficult subject, particularly when made out in the open, where it is not easy to get an individual lighting. The arrangement of the several plants, and the general management in lighting, focusing and exposure evince the skill of the artist. Perhaps, a lover of this attractive wild flower—which seems to have been unusually abundant this year—might wish more distinct definition in the convex surfaces in order to justify the name, "Queen Anne's Lace." All the same the group, as a whole, has been prepared and photographed with much skill.

Data: Indoors, July 10, 1921; illumination, 1,400 watts battery of Mazda lamps; K2 filter; 18-inch Turner-Reich Semi-Achromatic lens; stop, F/12; 3 $\frac{1}{2}$ minutes; 5x7 Eastman Portrait Film; pyro; enlarged on Artura Carbon Black; developed with Artura formula (Elon-Hydro).

Beginners' Competition

FRED BENNETT'S "Sun-Maid" is obviously a hastily made snapshot, but it has the merit of sunshine in the face of an attractive girl. The camerist happily gave the necessary space in front of the subject to show a proper balance. The other persons in the picture, though, perhaps, somewhat distracting, give the necessary character to an episode of which the camerist has left us all in the dark.

Data: "Taken by a width of Four by Five Graphic, with an F 4.5 lens, developed with pyro, printed on Azo F. Hard X."

"Assembly," by the winner of the second prize, rejoices in the element of novelty. There is a feeling of mystery, of uncertainty, in the long line of men trooping across and forming the background. The inadequate title leaves the beholder in the dark as to the purpose of the "assembly," whether it be an emergency call, a meeting preparatory to a funeral or some

other military duty. The design of the ensemble is certainly interesting and well-balanced.

Data: October, 7 A.M.; sun behind slight hill; Vest-Pocket Special (1 $\frac{1}{4}$ x2 $\frac{1}{2}$ inches); lens, F/6.9; stop, F/6.9; 1/25 second; Eastman roll-film; pyro, tank; enlarged on Bromide No. 6.

Example of Interpretation

Of all the articles written for this publication on the subject of photographing domestic pets, as regards both text and illustrations, the one by Käthe Hecht, in March, 1914, appears to be yet unrivaled. Whoever is not familiar with that remarkable dual achievement, and has access to the issue in which it appeared, has a rare treat in store for him. The subject offered as an example of rare tact and patience in managing the various creatures—dogs, ravens, toads, mice and chickens—grouping them artistically and photographing them quite successfully, is one of six masterpieces in animal-photography by this accomplished worker. The method of operation and use of camera and materials are described in the artist's article (mentioned above) "My Animals and My Camera."



Our Contributing Critics

JAMES B. HERRICK, the author of "In the Patio," page 204, offered for honest and constructive criticism, states that the picture seems to take with the general public, in San Diego, where he conducts a successful business in making photographs for calendars, candy-boxes, and the press. He has sold many copies, and occasionally exchanges prints with amateur and professional workers. Nevertheless, he is interested to know what is wrong with the picture. Data: Made in the New Mexico Building, at the P. C. I. exposition, in 1915; July, 3 P.M.; bright sun; 5x7 Only camera; Wollensak lens; at F/16; 3-time color-screen; Standard Polychrome plate; pyro, tank; enlarged on P. M. C. No. 7; developed with Elon.



Copying Sepia-Prints

It is much more difficult to copy sepia-toned bromide prints than black-and-white or printing-out prints, there being usually much loss of detail in the shadows. This is due to the non-actinic color of the image, which at a certain depth of deposit practically ceases to have any effect on the slow ordinary plates which are usually employed for copying. For this reason, says *The British Journal*, orthochromatic or, if to hand, panchromatic plates should always be used for such subjects. As there are no color-contrasts, a light-filter is not usually needed, although it will minimize the effect of surface-reflection. It is always desirable to use as large a lens-aperture as will give the desired definition, as a small stop always tends to give a more contrasty result. For the same reason, a strong light should be used to illuminate the original, even direct sunlight being suitable for very dark prints. Those who have had little experience in copying will find it instructive to make a strip-exposure pulling out the slide an inch at the time, so as to give exposures in the ratio of 1, 2, 4, 8, and so on. A first-class result is then ensured upon a second plate exposed for a time equal to that given to the correctly-exposed strip.



ON THE GROUNDGLASS

WILFRED A. FRENCH



A Novel Photo-Printing Toy

FAR be it from me to discourage the ambitious inventor of a practical photographic device; but if an originator of an idea arrives on the scene several years belated, or if his notion has no practical value, he should be "put wise" at once. Many a time, during the past thirty years, I have exercised my privilege to disillusion a hopeful inventor, saved him the cost of a journey to Washington, and heavy attorney's fees, or even the cost of constructing a working-model, which my knowledge of the photographic industry enabled me to do. I could relate many a sad tale of the shattered hopes of the inventor of a supposedly new type of camera, roll-film holder, tripod or washing-box, and his disappointment when he learned that his invention was not new, but had already been patented and was even much superior.

The inventor of a new photo-printer—an amateur in no need of the proceeds of a really new and practical accessory—submitted to me, recently, his plan in an entirely altruistic way. Any one who wishes may use his idea, and construct his own machine; but should it be already patented, it could not be made and used commercially.

According to my correspondent's rough sketch, the machine consists of a circular wheel, forty inches in diameter (could be made smaller, if desired) in the rim of which are inserted ten or twelve 5 x 7 printing-frames, of wood or metal, set vertically. The back of each, provided with a pad (to ensure uniform pressure of paper against negative) is hinged at the bottom, and opens at the top for the insertion or removal of printing-medium (gaslight-paper). The wheel, supported by four or more arms (spokes) radiating from the center, revolves slowly, actuated by electric current, the time of one revolution being about one minute. In the center is placed a 25-watt Mazda or an l.p. nitrogen lamp, according to the strength of light desired, and let on or shut off at will. The printing-frames are filled by orange-light, the electric current is let on, and the wheel set in motion (the speed of one minute per revolution predetermined). After one revolution, the light is shut off, the wheel stopped, and, by the ever-burning orange light, the printing-frames are emptied and refilled successively. And thus the work proceeds "smoothly and merrily."

Now all this is interesting, but obviously complicated and uncertain. The amateur-printer must have his mind on his work, to avoid mistakes. Of course, the inventor assumes that the negatives, thus being printed, are all of uniform density; for, unless the operator is a judge of printing-quality of plates or films, his batch of prints may be very unevenly exposed, spelling waste of time and material.

As a plaything, though possibly expensive, this revolving printer may interest some of our readers; but why should any one go to so much trouble, and face so much uncertainty of success, when a greatly superior printing-machine is already on the market and used extensively by professionals, semi-professionals and amateurs? Perhaps our friend, the ingenious inventor, is not yet familiar with the R. W. K. Photo-Printer.—compact, simple, all-metal, light, safe, for

plates and films, and, what is also important, inexpensive. He should procure at once from his dealer an illustrated circular. He will not only be convinced, but apply his inventive powers to some photographic accessory other than a photo-printer.

Buried Over Mt. Monadnock

As many camerists are understood to be interested in photographing Mt. Monadnock, this fall, it may be well to state that this beloved peak has a very interesting history, which is a feature of one of Herbert W. Gleason's most attractive lectures. Among the eminent men who have camped on Mt. Monadnock are Henry Thoreau and Ralph Waldo Emerson. Additional lustre has been imparted to its history by the fact that the ashes of the distinguished American painter, Abbott Thayer, have recently been scattered over the mountain, at the expressed desire of the artist and nature-lover.

The Patient Photographer

MR. F. M. SUTCLIFFE states in the weekly edition of the *Yorkshire Post* that he once saw two photographers weather-bound, waiting for the rain to stop to make a picture of a fine subject. They had waited all the morning and all the afternoon. At five o'clock one said, "If we are to catch the train—the last one—we must be off at once." The other said, "You can go if you like, but I am going to wait even if I stay here all night, and sleep in that barn." The photographer who stayed was rewarded about an hour later with the most glorious sunset-sky behind his subject it is possible to imagine. That he nearly cracked his skull the next morning against the roof of the loft in which he slept is neither here nor there.

She Had His Number

EDITOR OF THE GROUNDGLASS:—Our camera-club had its annual outing, not long ago. The *al fresco* repast ended with small cups of black coffee. Near me sat Al Ferguson, our newest member, nice fellow, and good worker. He had a young lady with him, who seemed devoted to him. It transpired that they were engaged. Being sweet on him, she sweetened his coffee putting in one lump. "Thank you, darling," he whispered. "But how did you know I required only one lump?" Said she sweetly: "Why, when we parted, last night, you said: 'Just one, dear.'"

F. A. WATSON.

Case of Mistaken Identity

AUNT ELVIRA rushed into the house, hysterical. "I've lost my hearing," she shouted. "You have?" her frightened sister shouted back. "How do you know?" "See that man out there playing that hand-organ? Well, I can't hear a single note," and Aunt Elvira wept again. "That's a motion-picture photographer at work," snapped her sister.—*Exchange*.



ANSWERS TO QUERIES



S. S. D.—Kodolon is an excellent developing-agent if made up according to formula. It is exceedingly sensitive to bromide, however, and if a blue-black print is desired, only about a fourth of the amount of bromide called for in the formula should be used.

G. C. K.—Color-prints can now be made by strictly photographic processes. The print—strictly speaking—is not on paper, but is composed of transparent films with a white-paper backing. The Hess-Ives process is quite simple but still rather expensive. The Hiblock is exposed in the camera as one plate. It is, however, composed of two plates and a film, which are separated after exposure and developed separately. Prints of each are then made on specially prepared film developed in hot water, and each one dyed a separate color—one yellow, one magenta and one blue. When dry, the three are superimposed in register and with a white-paper backing. They constitute together the Illicrome "print."

H. C. K.—For snapshot-work in city streets on bright days the shutter should be set at 1/50 of a second, the stop at F/16 and the focusing-indicator at twenty-five feet. This combination of shutter-speed, stop and focus will meet all ordinary requirements of the camerist equipped with a hand-camera. Virtually, any hand-camera—thus set—becomes equivalent to a fixed-focus box-form camera, and is eminently suited to genre-photography in city-streets.

W. J. R.—Films may be used after expiration-date, but successful results cannot be guaranteed. However, if the film has been kept in a cool, dry place, and it is not too long after the expiration-date, you should obtain fairly satisfactory results. Do not use such a film to photograph any subject which cannot be duplicated readily. Such a film is an ideal one with which to experiment, and its use for this purpose is preferable for any serious work.

S. B. A.—The advantage of a reflecting-camera lies in the fact that the image of the subject appears on the groundglass right-side up until the shutter is released. No focusing-cloth or tripod is required to compose each picture properly and to the best advantage. There are many excellent reflecting-cameras now on the market. Some foreign instruments fold into small compass and may be carried as easily as a small hand-camera. Most reflecting-cameras are equipped with focal-plane shutters and are used extensively to make speed-pictures. However, these cameras are equally well-adapted to all forms of amateur and professional photography. Owing to the remarkable efficiency of the focal-plane shutter, the use of an anastigmat lens is virtually required to obtain satisfactory results. All reflecting-cameras are listed with high-grade lens-equipments. The selection of the lens depends on speed, focus and cost, and rests entirely with the individual camerist and his requirements.

K. Y.—One way to mount pictures with paste is to obtain a large piece of plate-glass, collect the prints from the wash-water and place them face down on the glass—one on top of the other. Then apply the paste to the topmost print with a large brush—being careful to cover all corners thoroughly—lift the print from the pile and mount it. Continue to do this

until the last print is reached. If the pile is not moved the paste will not reach the picture-side of the prints.

O. C. M.—Horizontal scratches on roll-film negatives are sometimes caused by trying to twist the paper more tightly around the spool after removing it from the camera. If, in addition, small particles of emulsion become loosened during the operation of twisting, they are apt to tear long, deep gashes in the celluloid base of the film. Such abrasions cannot be removed satisfactorily by retouching. Whenever possible, use a roll-film camera that is equipped with some form of tension spool-holder. This device prevents the film from unrolling faster than the winding-key is turned. In any event, it is far better to wrap up a loosely wound roll in heavy manilla paper than to try to twist the black paper more tightly around the film. Attention to this matter is of the greatest importance.

R. M. S.—With regard to the use of ammonium persulphate in developers, we do not indorse the use of persulphate in a developer because so far as we can see the persulphate simply oxidizes or destroys some of the developing-agent, thus reducing the developing-power of the developer. Any decrease in contrast of the resultant image we think is a direct result of the destruction of the developing-agent rather than any catalytic action of the persulphate.

You are correct in the assumption that the volume of developer is increased by the volume of the persulphate-solution added. Mr. Cohen dilutes two ounces of developer with four ounces of water, thus making a total of six ounces of developer, one-third the strength of the original. The addition of four grains of persulphate to this would mean a concentration of two-thirds of a grain of persulphate per one ounce of developer.

We think that the quantity of persulphate added should be in proportion to the quantity of developing-agent rather than in proportion to the dilution of the developer; otherwise with a dilute developer if one grain of ammonium persulphate was added to one ounce of developer, then the effect would be much greater than if the persulphate was added in this proportion to a stronger bath.

With regard to information on telephoto-lenses, we would refer you to the following publications: "Photographic Lenses," by R. & J. Beck; "Telephotography," by T. R. Dallmeyer; "Modern Telephotography," by O. W. Wheeler; and "Telephotography," by C. F. Landis. These books may be obtained from PHOTO-ERA MAGAZINE at regular prices.

S. M. S.—What steps to take to become a professional photographer is rather a difficult question to answer intelligently. In the first place, without knowing your photographic ability and natural talent it is very difficult to say whether you would be able to qualify as a portrait, landscape, marine, press, motion-picture, or commercial photographer. Our suggestion would be to take a short course at one of the schools advertised in PHOTO-ERA MAGAZINE and obtain thorough, first-hand acquaintance with the various branches of the profession. Then it should be easier for you to make up your mind whether you really liked photography; and, if so, of what branch you might prefer to make a specialty.



EVENTS OF THE MONTH

Announcements and Reports of Club and Association Meetings, Exhibitions and Conventions are solicited for publication



New England Photographers' Convention at Springfield, Mass.

THE photographer who does not attend the annual assembly of the organisation of which he is a member, takes his profession lightly. He misses opportunities to improve his efficiency, his business and his mind. By staying away, he loses exceptional chances to renew valuable friendships, to exchange ideas of mutual interest and to feel that human touch that kindles hope, sympathy and courage. If seventy-five per cent, yes, even fifty per cent, of the active membership of the P. A. of N. E. had attended the twenty-third annual convention, at Springfield, recently, the lecture-room and exhibition-hall would have been filled, and the demonstrators and exhibitors well paid for their efforts. Yet, those that were present, a goodly number—about one hundred and fifty—profited by what they saw and heard and returned home the better for their little journey to beautiful Springfield, and the moderate expenditure of time and money. The total registered attendance was three hundred and fifty.

To be sure, the convention was not entirely what the committee had planned. The manufacturers of electric-light machines for portraiture were conspicuous by their absence, fearing—as we were told—that they would be obliged to pay a high charge for the use of electric current, as was the case at the recent National Convention, at Buffalo. Though assured to the contrary, by President Peterson, they decided not to take another risk. At Buffalo, they were promised free use of electric current, and yet had “to come across” with a heavy fee. A prominent Boston artist—though booked to tell the photographers what to avoid in portrait-making—failed to keep his Springfield engagement, and the platform in Mahogany Hall, on Thursday, 2.30 p.m., was not unlike Old Mother Hubbard's cupboard.

Outstanding Features

The convention, which lasted virtually three days, September 7, 8, and 9, with a preliminary meeting, followed by a concert and dance, on the evening of the 6th, offered two good, educational features. The first was the making of portraits, by appointment, and at five dollars for each sitting paid at the time, by three master-photographers, John H. Garo, of Boston, I. Buxbaum, of Brooklyn, and J. A. Erickson, of Erie, Pa. Mr. Garo used daylight illumination, producing characteristically superb results. Mr. Buxbaum employed an electrically connected 3 c. 400-watt Mazda lamp, as he did at the Buffalo convention, and Mr. Erickson, alternately, arc-light and Mr. Buxbaum's hand-lamp. The total receipts, amounting for the three days to several hundred dollars, are to be added to a fund for the immediate relief of needy and worthy retired members of the Association—a cause approved heartily by all.

The other feature was a series of talks, accompanied by motion-pictures made by himself, by J. Chester Bushong, of Worcester, showing how motion-pictures of the children of studio-customers, in the open and in the home, may be made a profitable side-line. Mr.

Bushong projected a series of reels showing his own children at play, around the home and at his summer-camp, merely to indicate how easily, and also profitably, the motion-picture camera may serve as a valuable adjunct to a portrait-photographer's regular business. The outfit Mr. Bushong employs in making the negative-film is the Universal motion-picture camera, the results, as shown on the screen by him, at the convention, being eminently satisfactory.

By a vote passed at the convention, the new Board will determine the place of the next meeting. Unless it again be Springfield, with its ideal exhibition-hall and lecture-room, light and service, entirely free, it will be exceedingly difficult to find anything so convenient and inexpensive as this city on the Connecticut River.

Manufacturers and Dealers

The following firms had space in the Auditorium (exhibition-hall): Ansco Company—W. B. Mussen, gen. sales-manager, Paul True, Frank Hearn, L. D. Field, Frank Leache; Cyko display. Burke & James, Inc.—H. P. Saubert; Universal Motion-Picture Camera, and publication (free) “Motion-Picture Photography.” California Card Mfg. Co.—Wm. A. Leonard. Capitol Photo-Supply Co., New York—Benj. Glaaser. Ciba Co., Inc., New York—H. C. Rasmussen; display of photo-chemical products, Metagol. Cramer Dry-Plate Co.—R. P. Brackett, Joe Dorella; fine display of 8x10 negatives on Hi-Speed plates and corresponding contact glass positives. Collins Mfg. Co.—J. K. Harriman, Joseph Kinn; Mounts. Chilcotte Co., Cleveland—E. N. Bridges; Mounts. Defender Photo-Supply Co., Inc.—W. H. Salmon, sales-manager, R. L. Ennis, F. B. Newhall, A. E. Clark, E. H. Coults; special photo-papers for the professional and the amateur. Eastman Kodak Co.—C. F. Ames, Arthur H. Paul, Harry M. Fell, W. L. Pierce, Harry Wills, C. F. Becker, H. F. Arnold, H. A. Collings, C. A. Nelson, Chas. H. Leake, Ira Lindsay, H. T. Rydell, John White; notable illuminated display of 8x10 Portrait Films with corresponding contact-prints on Artura Paper. Goerz American Optical Co.—A. Bohm; camera-lenses. Graham Co., J. S., Inc.—Grant Wilson; mounts. Haloid Co.—F. W. Godfrey; photo-papers. Hammer Dry-Plate Co.—C. Shafer; display of prints made on their plates. Japanese Water-Color Co.—beautiful display of photographs colored by the firm's product. Johnson, L. M.—Howard K. Burdette; picture-frames. Lodge Co., E. N., Inc.—E. O. Wagner; mounts. McCabe Co., J. W., Inc.—J. H. Jolley; mounts. Medick-Barrows Co.—R. H. Barrows; frames. Meteor Chemical Works (John G. Marshall, chemist and proprietor) Brooklyn—Otto Goerz, H. E. Kuhn; Meteor Chemicals (American-made); display of photo-chemicals for the professional and amateur, in bottles and cartons. Murphy, Geo., Inc.—Percy Y. Howe, sec'y, J. A. Murphy, G. W. Harse; display of mountings. PA-KO Corporation—James E. Reedy, Reliable Photo-Mount Co.—Springfield, Mass. Robey-French Co.—Thos. Roberts, mgr., Fred Q. Avery, Geo. McLaughlin, W. Reed, C. J.

Marion; display of cameras and accessories; novel background-carrier. Simplex Photo-Specialty Co.—E. H. Schmicking; print-dryers, copying-boards. Sprague-Hathaway Co.—Philip P. Smith, sec'y. L. H. Zeff, F. B. Elwell; picture-frames, miniatures, photo-enlargements. Springfield Chamber of Commerce, Convention Bureau of Information. Taprell-Loomis Co.—M. Sholl; Mounts. Trager Brothers.—S. C. Rose; picture-frames. Wollensak Optical Co.—M. C. Williamson; Verito, Velostigmat and other standard camera-lenses; their monthly booklet, "Shutter-Efficiency," free.

The Photographic Press of America was represented by *Abel's Photographic Weekly*, J. C. Abel; *Bulletin of Photography and The Camera*, Frank V. Chambers; PHOTO-ERA MAGAZINE, Wilfred A. French.

Picture-Exhibits

The usual exhibits by members of the Association, arranged on screens on the stage, were of good technical and artistic merit. There were also numerous complimentary exhibits from Canada and from neighboring states, also several from Europe. The displays by Rupert S. Lovejoy, Horace A. Latimer, and Francis O. Libbey, of the Portland (Me.) Camera Club, were of high artistic excellence and attracted attention.

Salon-Honors

The following pictures, by members of the Association, were selected by the jury for their high artistic and technical excellence. They were displayed on a separate screen, on the floor:—Landscape (simple, well composed and in a low key), former President W. H. Manahan; head of a girl, Erik Stahlberg; portrait of an old man, A. G. Nakash; portrait of a young boy, W. H. Manahan; and two small winter-landscapes, Geo. E. Tingley.

Hilarity at Riverside Park

About three hundred photographers, manufacturers and dealers were conveyed by steamboat to Riverside Park, on the Connecticut River, where they were treated to a sumptuous clambake, followed by visits to the numerous, merry side-shows. A feature, before dark, was a baseball-game, crammed with side-splitting incidents, between the manufacturers and photographers. The former were defeated by 12 to 10.

Present for President Peterson

On the closing day of the convention, President A. K. Peterson was presented with a valuable and artistic diamond scarf-pin, on behalf of the members of the P. A. of N. E., for his faithful and untiring efforts as chief executive of the Association.

Treasurer's Report

(September 4, 1921)

<i>Receipts</i>	
1921	
January, Balance to new account.....	\$1,783.03
August 12, P. B. Kenyon, Sec'y.....	346.75
Sept. 2, P. B. Kenyon, Sec'y.....	301.50
	<hr/>
	\$2,431.28
<i>Expenditures</i>	
Approved bills paid to date.....	\$228.79
Deposited in Home Savings Bank.....	1,000.00
Cash on hand.....	1,202.49
	<hr/>
	\$2,431.28

The New Board

The election of officers resulted as follows:

President, Louis Oliver, Providence, R.I.
1st Vice-president, Mrs. Sue Rice, Quincy, Mass.
2nd Vice-president, Eugene Gray, Worcester, Mass.
Secretary, Erik Stahlberg, Northampton, Mass.
Treasurer, E. A. Holton, Boston, Mass.

State Vice-Presidents

Maine—Harry Allen, Livermore Falls.
New Hampshire—H. C. Cutler, Keene.
Vermont—C. E. Shorey, Brattleboro.
Massachusetts—Frank Bailey, Lynn.
Rhode Island—Chas. Clarkson, Newport.
Connecticut—Harry Blackmore, Hartford.

Springfield Chamber of Commerce

With unfailing courtesy, the Chamber of Commerce, of Springfield, again tendered the Photographers' Association of New England the free use of the magnificent Auditorium, and all the adjoining rooms; Mahogany Hall, as a room for the daily sessions, demonstrations and lectures, and the free and unlimited use of electric lights and electric current. It also supplied free organ concerts by Professor Turner, the foremost organist of Springfield. Such hospitality and generosity is rare, indeed, and deserves the highest recognition. It was fittingly acknowledged by a rising vote on the last day of the convention.

Dwight A. Davis Retires from Business

AFTER having been forty-five years in the book-business, a vocation that he has found enjoyable and profitable, Dwight A. Davis, also well known as an amateur-photographer, has retired. He has been a credit to the book and stationery trade and can look upon his long life of business-activity with a high degree of satisfaction. But he never was so busy but that he could practice, occasionally, his favorite hobby—photography—in which field he gained distinction; indeed, for some years past, Mr. Davis has enjoyed the reputation as a photo-pictorialist of the first rank. He has exhibited his work at the Pittsburgh Salon and elsewhere. A number of his finest achievements in pictorial photographs have adorned the pages of PHOTO-ERA MAGAZINE, during the past ten years.

It is now with pleasure that we learn of Mr. Davis' intention to devote himself to rest and recreation, and, particularly, to the practice of photography. We hope, therefore, that the photo-pictorial world will see more of his artistic and delightful interpretations of nature and of child-life.

Such Is Fame

READERS of PHOTO-ERA MAGAZINE will remember Emerson's well-known remark to the effect that no matter where a man might live, if he made a better mouse-trap than any one else a path would be worn to his door by eager purchasers.

In a sense, we have had an experience to bear this out. Incidentally, we are sure that the subscriber in question will not object to our mentioning the matter. Briefly, we received intact a subscription with remittance from Oakesdale, State of Washington, addressed exactly as follows: "Wolfboro, New Hampshire, U.S.A., Boston, Mass., 367 Boylston Street." The name of PHOTO-ERA MAGAZINE did not appear at all, but we received it nevertheless.

WE regret deeply to record the death, on August 24, 1921, of Mr. Henry H. Turner, president since 1884 of the Gundlach-Manhattan Optical Company, Rochester, New York. A brief illness of only three days preceded the end. Mr. Turner was born in Port Jervis, New York, February 2, 1856. His parents were John and Eliza McCown Turner, natives of Scotland, who came to this country as children and were married in New York in 1846. They then removed to Rochester in 1862 where Mr. Turner received his education in the public schools and learned the machinist's trade. He was employed in the grocery-business for nine years, after which he entered the employ of Sargent & Greenleaf. In 1884, with John C. Reich and John Zellweger, he established the Gundlach Optical Company, which several years later was merged with the Manhattan Optical Company to form the Gundlach-Manhattan Optical Company. The first products were microscopes and accessories; these were followed by photographic lenses, cameras, prism-binoculars and a more general line of photographic and optical goods.

Mr. Turner was well known to the trade through his long connection with this business. He was a member of several organizations including the Chamber of Commerce, Rochester Club and Old Colony Club. Mr. Turner was a man of genial temperament, always good-natured and fair-minded, a good citizen, and a man who was respected by his competitors. We extend our sincere sympathy to his family and business-associates.

Wellington Contest

A PHOTOGRAPHIC contest is to be held by Wellington & Ward, Elstree, Herts, England, which is limited to professional photographers with a place of business in the United Kingdom. We are informed by Ralph Harris & Company, 26 Bromfield Street, Boston, Mass., the United States agents, that this contest promises to be of exceptional interest to British photographers. Our English readers will do well to obtain further particulars direct from Wellington & Ward.

New Members of Pittsburgh Salon

WE are informed by Mr. Charles K. Archer, secretary, that William A. Aleock and T. W. Kilmer, New York City; Richard M. Coit, Brooklyn; Holmes I. Mettce, Baltimore; George H. High, Chicago; G. H. S. Harding, Berkeley, and Ernest Williams, Los Angeles, Calif., have been elected to full membership in the Pittsburgh Salon. We are sure that readers of PHOTO-ERA MAGAZINE will be glad to learn of the well-deserved success of these progressive enthusiastic pictorialists.

Onondaga Photographic Club

THE First Annual Salon and Competition of the Onondaga Photographic Club of Syracuse, N.Y., will be held during the month of October in the club-rooms, 35 Grand Opera House Building, Syracuse. There are to be prizes amounting to one hundred dollars. The competition was open to all amateur photographers in Central New York, and entries closed September 30, 1921. Information with regard to the Salon may be obtained from the secretary. We wish the First Annual Salon every success and hope that it will tend to increase the number of men and women in Syracuse who will learn to enjoy photography.

"Florida Impressions"

It is with pleasure that we announce the publication, in December PHOTO-ERA MAGAZINE, of a feature-article, "Florida Impressions," by Thomas S. Carpenter. The illustrations are of exceptional beauty and interest. The author is a pictorialist of the first rank and a charming writer. His account of many visits to Florida will prove to be a literary and pictorial treat. Readers of the magazine will do well to place an order in advance for this Florida number.

Fifth International Photographic Salon

UNDER the auspices of The Camera Pictorialists of Los Angeles, the Fifth Annual Photographic Salon will be held in the Gallery of Fine and Applied Arts, The Los Angeles Museum of History, Science and Art, Exposition Park, Los Angeles, December 12 to January 2, 1922. The last day for receiving prints will be Saturday, November 26, 1921. Further particulars and entry-forms may be obtained from Louis Fleckenstein, Director, 31 Walker Auditorium, Los Angeles.

Be Prepared

A COMMON failing of many photographers who are mainly occupied with portrait-work is a lack of readiness to undertake a "rush job" at a moment's notice. It sometimes happens, says a British cotemporary, that a record is required of an accident or perhaps, a crime, when every moment is precious; and, if there is any delay caused by having to collect the various items of an outfit, or by reason of the apparatus being too heavy or bulky to be transported with ease, the opportunity is lost, to the annoyance of the would-be customer and the pecuniary disadvantage of the photographer. To avoid such contingencies it is well to have a small camera, let us say, postcard size, ready to pick up and carry out. Even the filling of plateholders causes needless delay, so that roll-film or a film-pack is to be preferred to plates, as film does not deteriorate so rapidly as plates do in many plateholders. A postcard-size film-camera is very suitable for this class of work, and it should be provided with a light tripod. Snap-shooting should be avoided, the lens being well stopped down, and time-exposures given, so as to get negatives which are well exposed and filled with detail. The absence of a swing-back is a disadvantage; but it will be found that it is rarely required in this class of work.

Fatal Cheapness

ONE of the most insidious pitfalls which beset the path of the young photographer is the idea that a successful business can be built up by charging prices which are lower than those of his established rivals. It should always be borne in mind that it is much more difficult to obtain decent prices after working for low ones than it is to do so from the beginning. We have had many opportunities of watching the beginning and progress of young professionals, and can say with confidence that those who have adopted the highest scale prevalent in their neighborhood have been more successful than those who have begun by "cutting." The reason is obvious. The established man has a larger clientele, and therefore his running expenses are not so heavy in proportion as those of the beginner, who is therefore tempted to economise in materials and labor to the detriment of his work.—*The British Journal*.



LONDON LETTER

CARINE AND WILL CADBY



Our first thought, when the catalog of the London Salon Exhibition reached us, was how swiftly time had been flying. Could it really be almost twelve months, we thought, since we had been walking around the gallery and comparing the exhibits mentally with those of the year before? And then, being on a holiday and having leisure, we become retrospective and review

"The London Salon of Photography will be held at the Galleries of the Royal Society of Painters in Water Color, Pall Mall, East, from September 10 to October 8," to quote the entry-form, and the sending-in-day is August 31, so that would-be exhibitors will have the whole of the holiday-month to get their masterpieces. We may hardly believe that serious



THE GALLOPING GLACIER

WILL CADBY

in our minds the old Salons of the Linked Ring which made up in reputation what they lacked in financial success.

One of the soundest moves of the present-day, practical Salon is the admittance of unmounted prints. It must save an immense amount of labor and complication. No wonder that many of the other photographic societies have adopted it. Another sensible innovation is the five-shilling packing-fee which every exhibitor has to pay. These are details, but they are the result of forethought and experience, and have helped to make the Salon a financial success and, after all, as they say, "money talks."

photographers could leave their exhibition prints till so late. But we used to know several exhibitors who had so little time during the year, that all serious effort had to be left to the summer-holidays. That is the worst of photography, in order to get results that are worth having, it cannot be picked up and dropped at will. If we intend to do anything that may have a chance at the Salon, we must be free of other distractions and have time to try again and again, consecutively, so that we can use our experience.

The Salon which struggled gallantly through the war-years is now coming into its own, and is each year

(Continued on next page)



BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished us at the lowest market-prices. Send for our list of approved books.

THE ARTISTIC ANATOMY OF TREES—Their Structure and Treatment in Painting. By Rex Vicat Cole. Second edition. 8vo, 347 pages, including appendix, bibliography and index. Illustrated with 50 examples of pictures from the time of the early Italian artists to the present day; 165 drawings by the author and 300 diagrams in the text. Cloth, 15 shillings net. London: Seeley, Service & Company, Ltd., 1920.

The importance of trees in the pictorial compositions of well-known amateur and professional photographers is evident in the beautiful effects that are obtained by their careful placing and selection. However, to do this intelligently necessitates more than a superficial knowledge of trees and their relation to pictorial photography or painting. In Mr. Cole's delightful volume the reader enjoys a well-written, authoritative description of tree-life from the point of view of a nature-student and trained artist. Plates of landscapes by Gainsborough, Botticelli, Corot, Rousseau, Rubens, Turner and many others serve to illustrate the beautiful effects obtained by these masters of landscape-painting and composition. These examples are supplemented by many illustrations and drawings that are of much practical value. The nature-photographer will find this book to be of great help in arranging specimens to the best advantage for examination. The botanist will learn many interesting facts about trees, their distribution in various parts of the world and their anatomy. We believe that Mr. Cole has written a book that will appeal alike to the artist, photographer and nature-lover. It is an incentive to learn more about trees and their beautiful relation to the work of the pictorial photographer and artist.

London Letter

(Continued from preceding page)

gaining added popularity. If it is not quite the same old Salon with which we were connected, it yet retains a real catholic and progressive spirit. And, as in the old days, we usually had some exhibit that acted as a sort of comic relief, as, for instance, when Alvin Coburn portrayed George Bernard Shaw as a nude; so now there is always some sensational picture which is naturally seized on by the press: a cubist-portrait of Ward Muir, by Bertram Parke, or a daring theatrical study by Hugh Cecil.

Being in the country where the Council of the League of Nations meeting, we hear a good deal about it. The first public sittings were held in what is called the Glass Room. Three sides of this are windows, and the fourth consists of mirrors and glass-doors. What a chance for photography! we hear our readers say. And so it was; for to quote from a Swiss paper: "The first meeting was partly notable to those present for the prominent rôle played by the photographers, of whom there were quite a number with formidable apparatus, among them being a cinema operator from Paris. These individuals, sublimely indifferent to the

words of the orators, clicked away during the greater part of the proceedings, moving about from one point of vantage to another and placing themselves within a few feet of the speakers who were striving to hold the attention of the meeting." One hears a good deal about the boldness of the press-photographer; but for sheer brazen push, surely this cannot be beaten. We confess to a feeling of relief that the cinema-man did not belong to our nation, nor to the reader's. We were told, however, that although the attention of the listeners must have been distracted, the speakers themselves appeared as indifferent to the photographers as the photographers were to them.

We had occasion, in our last letter, to refer to the Sanger-Shepherd Graduated Screen, which is particularly useful when photographing snow-capped mountains and white clouds all on the same plate, with a foreground of green pastures and brown rocks. Since mentioning this subject, we have found from personal experience that the graduated screen has one rather troublesome drawback; it cannot, in its present form, be used in conjunction with a lens-shade, which is absolutely necessary when photographing towards the sun. But we found this difficulty could be surmounted by placing the graduated screen *inside* the bellows, where it worked just as well as when on the front of the lens. The variation of movement, up and down, is, of course, limited; but as the graduated filter extends about half way down the glass in which it is imbedded, always getting thinner, it met the requirements of most cases. It must, if used inside the camera, and consequently behind the lens, be reversed, the dense end of the screen being placed at the bottom instead of at the top. This alteration we at first forgot to make; but on examining the picture on the ground-glass, the mistake was at once discovered. We have been using the screen on a $2\frac{1}{2} \times 3\frac{1}{2}$ -inch hand-camera, in this way, with very satisfactory results, the snow and the light clouds printing without any trouble and in the same time as the green hills of the foreground.

All the world has heard of the Upper Grindelwald Glacier, which early this year very considerably accelerated its downward movement. So marked was the advance, that four months back accurate apparatus was set up to measure its progress. It was found that in June it was traveling at the rate of a foot in twenty-four hours. Its present pace is about nine inches. We visited it within the last few days and made a photograph of the part of the face that is moving the fastest, which we enclose in case the Editor should wish to reproduce it. But, as every American camera in Switzerland this summer has been headed for the "galloping glacier," it may not be the latest portrait to hand.

Of course, nothing grows at the glacier's edge, in the usual course of nature; but in our illustration it will be seen that there are young fir-trees and undergrowth almost beneath the great blocks of ice. This doomed vegetation will be submerged before these words are in print, and a photograph made a month later would show nothing but devastating glacier.

Yesterday, we heard one of the greatest compliments ever bestowed on photography. Coming back in the train from the Jungfrau Joch (11,400 feet above sea-level) we got into conversation with an American from Ohio. He told us that he had come to Switzerland, as it had always been his dream to see the Jungfrau Mountain. A neighbor and friend had a positive showing this Queen of Peaks, and it was hung in his study-window where it caught the evening-sun, so that it glowed, as it does here, with a rosy "Alpenglühén." And it was this photograph which had lured the American across the world.



RECENT PHOTO-PATENTS

Reported by NORMAN T. WHITAKER



THE following patents are reported exclusively for PHOTO-ERA MAGAZINE from the law-offices of Norman T. Whitaker, Whitaker Building, Washington, D.C., from whom copies of any one of the patents can be obtained by sending twenty-five cents in stamps. The patents mentioned below were issued from the United States Patent-Office during the month of August, the last issues of which have been disclosed to the public.

Patent, Number 1,387,318. Process and Device for Ascertaining the Correct Exposure for Copying Rows of Pictures on Film-Bands. Arthur Schulze of Berlin, Germany.

Photographic Camera; patent, Number 1,386,703, has been granted to John S. Greene of Rochester, N.Y., assignor to Photostat Corporation of Providence, R.I.

Louis W. Rosen and Pincus Brauner of New York, N.Y., have been granted patent, Number 1,386,733, on Film-Shifting Device for Cameras. The patent has been assigned to Adolph E. Brion, New York, N.Y.

Patent, Number 1,385,403. Machine for Treating Photographic Moving-Picture Films. Camille A. Sentou and Etienne Jacquet of Fort Lee, N.J., assignors to Sen-Jacq Film Print Co. of Fort Lee, N.J.

Camera-Shutter Control; patent, Number 1,385,476, has been granted to Benjamin F. Schmidt of Exeter, California.

Valculon L. Ellicott of Baltimore, Md., has been granted patent, Number 1,385,940, on Method of and Apparatus for Determining Photographic Exposures.

Patent, Number 1,386,262. Print-Washing Tank. Vera F. Langton and James J. Underwood of New York, N.Y.

Perspective and Angle of View

MOST photographers who have passed the very elementary stage, and many people who are not photographers at all, are aware of the apparent falsity in pictures which have been made by means of a lens which includes a wide angle. So common has the fault been that it is often spoken of as "photographic perspective," as if it were inherent in a photograph. Yet however wrong such a print may seem, it only appears wrong because it includes too much. The central portion of the picture is identical with the picture which would have been obtained from the same position if a narrow-angle or long-focus lens had been used. Consequently we can obtain a picture with the same drawing exactly as we should obtain with a long-focus lens, by the simple process of trimming down the picture obtained with the short-focus lens.

For example, an 8-inch lens used on a 12 x 15 plate would be regarded as a very wide-angle lens. Objects in the foreground would appear unnaturally large in relation to distant objects. But the same lens, used from the same standpoint, on a 2½ x 3½-inch plate would not include these foreground-objects at all; and therefore there would be no opportunity for this apparent distortion to arise. We should get on the 2½ x 3½-inch plate just what we should get in the central portion of the 12 x 15 negative; and, assuming that the position of the camera was the same, the two pictures would be identical in every respect. Such a lens on such a plate would be a narrow-angle lens—or a long-

focus lens, for the two terms, although they do not mean the same thing, are generally used indiscriminately. Therefore before a lens can be described as of long focus or of short focus, wide angle or narrow angle, we must not only know its focal length, but must also know the size of picture it is to be used to produce.

Just as an unusually short-focus lens gives us apparent distortion by magnifying near objects compared with distant ones, and therefore by making the distance seem more distant; so an unusually long-focus lens gives us an apparent distortion of exactly the opposite kind. It is true it is not usually so readily recognised; but there are occasions when it is very obvious. The effect is that of making distant objects appear much nearer to any foreground-objects which are more or less in a line with them.

Such an effect is frequently to be seen in the snapshots made at cricket-matches, and other sports-meetings, by press-photographers, and reproduced in the newspapers. The long-focus lens is very tempting for work of this sort, because it allows the photographer to get figures of a good size in his picture at events to which he cannot get very near.

For instance, in the case of a cricket-match, the photographer who is using such a lens from a position at the edge of the field, and approximately in a line with the two wickets, obtains a photograph in which the bowler and batsman at opposite ends of the pitch are virtually of the same size, and therefore seem close together. The length of the pitch seems to have been shortened until it is no more than a few feet. Any one looking at a few copies of the illustrated daily papers will have no difficulty to find examples of this.

F. J. MORTIMER, in *The Amateur Photographer*.

Glycerine and Fading

WITH the increasing use of double-weight bromide papers there has been a temptation to revive the practice of giving a weak glycerine bath to prevent curling. In these circumstances, it may be useful to call attention to the danger of inducing fading in bromide prints by keeping them in a damp condition. Bromide prints in our possession made nearly forty years ago are now in quite good condition because they have been kept in a perfectly dry place, and others, made only two or three years and kept on the darkroom shelves, where the atmosphere is always damp, have faded to a sickly-yellow. A large collection of unmounted, plate-marked prints which had been treated with glycerine to ensure flatness faded almost to invisibility in a few years. If a demonstration of the hygroscopic qualities of gelatine be needed, we have only to observe the surface of a tray of hectograph composition, which is composed of gelatine and glycerine, which has been left uncovered for twenty-four hours in damp weather. The surface is found to be covered with globules of water absorbed from the atmosphere. In a lesser degree this is what happens to the glycerine print, the dampness of which facilitates the action of the sulphurous vapors found in the atmosphere of all cities.

The British Journal.



"Sendlinger Optical Glass"

THE manufacture of high-grade optical glass is a science that increases in interest the more that we learn about the intricate processes involved. A very comprehensive and well-illustrated booklet, "Herstellung und Eigenschaften des optischen Glases," published by the Sendlinger Glass Works, Zehlendorf, Germany, has reached us through the courtesy of Mr. Fred Schmid of the C. P. Goerz American Optical Company, New York City. Mr. Schmid informs us that his firm is to act as distributor of Sendlinger Optical Products in the United States. Those of our readers who understand German will find the booklet mentioned to be of interest and value. Opticians who are in the market for high-grade glasses should avail themselves of this opportunity to obtain a first-class product through a reliable firm.

Renewed Interest in Printing-Out Paper

THERE seems to have been a revival of the interest in printing-out paper during the last few months; and the lead which gaslight paper has been taking with amateur photographers in general, which bade fair soon to make printing-out paper obsolete, has not been increasing quite so fast. There is a depth and quality about a good printing-out paper print which makes a strong appeal to many, and there are others to whom the apparent ease of a process which allows the progress of printing to be watched, seems to constitute a great advantage. The first mentioned merit is a real one; but the second is more doubtful.

If the final appearance of a print on printing-out paper were the same as that which it presents when it is taken out of the printing-frame, no one would question that the visible image is a great help. But the treatment which the print has to receive, whether in a plain hypo-bath or in toning-and-fixing solutions, causes a great alteration in depth; so that some experience is necessary before one is able to know just how far to carry the printing. Probably most of those who print both on printing-out paper and on a development paper will agree that it is simpler to make a good print on gaslight-paper.

Not only is there the difficulty of judging the depth of printing; but the toning itself seems to have its pitfalls. This is especially true of self-toning papers, if we are to judge by the rarity of prints which come up to the standard set by the makers' specimens. It would be a mistake to suppose that as good and rich a result cannot be obtained on a self-toning paper as on printing-out paper which is toned and fixed, either separately or in a combined bath; but such a result is assuredly much less common. Some share of this is due to the greater flexibility of the toning-and-fixing process, by means of which we are able to get good prints from negatives which differ in contrast a good deal. With a self-toning paper the character of the negative influences the character of the print much more directly.

It would not be a very great surprise were there to be some recrudescence of printing on printing-out paper among amateurs of a certain standing. The

type of worker who uses self-toning paper on account of its simplicity is not likely to leave it for any material but gaslight-paper; but the photographer who has passed that stage, and can make good negatives and clean prints from them, may feel a revival of interest in a printing-process, which has much to recommend it. It would be a pity were the process to become obsolete, as a good rich, well-toned print on printing-out paper has a very distinctive quality of its own, which is not to be duplicated by any other method. It is still, of course, far from dying out; but the rapid growth of gaslight-papers in popular favor seemed to have been pointing in that direction.

W. R. LYNN, in *The Amateur Photographer*.

Cameras Everywhere

AN editorial in an English contemporary refers to the interest shown in photography throughout England during the past summer. It appears from the account that we in the United States have much to do to make the statement "cameras everywhere" true here. The editorial says, "One of the outstanding features of the summer-holiday this year is, beyond question, the prevalence of the camera. A friend returning from a famous watering-place reported that everyone seemed to be carrying a camera, and that the wire-baskets set up to receive waste-paper stood out as yellow patches from the number of roll-film spool wrappings they contained. This great advance in the popularity of the hobby will not amaze any one who reads these pages, as we have referred on several occasions lately to the extraordinary increase in the number of amateur photographers. Much of this has been caused by an energetic propaganda on the delights of photography; but a great deal of that propaganda will merely be wasted effort, if, when the holidays are over, the camera is put aside until this time next year, or forever. Any beginner who reads our pages has constantly brought before him the many ways in which he can get pleasant amusement from his hobby, not merely during his annual holiday, but right throughout the year; in fact, he passes from a temporary or casual snapshotter to become a permanent member of the fraternity. The enjoyment of camera-work does not cease when one has snapped his friends or his family, and got a few seaside-groups or views of beauty-spots; in fact, when this has been done, the threshold of the pleasure of photography has hardly been crossed, as so many of our readers know. We hope, therefore, that many of those who have only recently begun to read the paper will continue to do so; we can promise to lead them into the fresh fields and pastures new."

If our British friends, with all that they have had to bear after the war, can stir up such a general interest in amateur photography—and make a success of it—what is to prevent the photographic dealers, manufacturers and press in the United States from making a success of a similar campaign, *here*? Surely present conditions in this country are no worse than they are in England. Unquestionably, far-sighted photographic dealers and manufacturers who back up their optimism with a well-directed publicity-campaign will be the first to enjoy the return of *real prosperity*.

A. H. B.

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Vol. I

OCTOBER, 1921

No. 10

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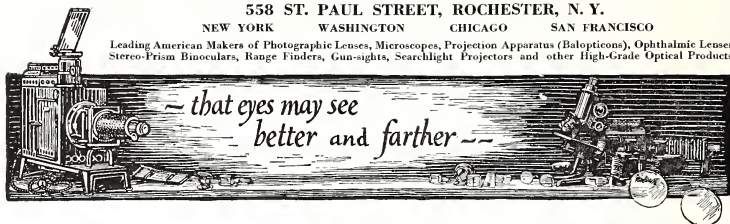
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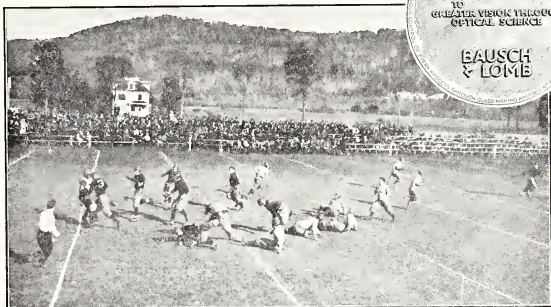
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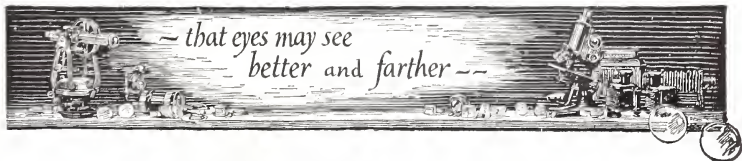
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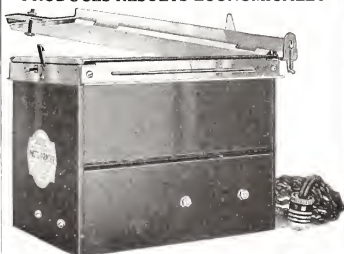
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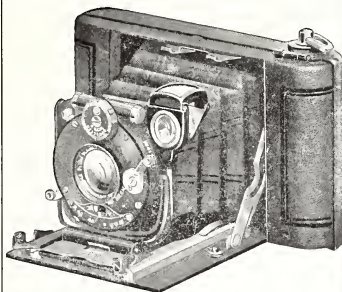
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PHOTO-ERA MAGAZINE

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Selling Your Photographs

FREDERICK C. DAVIS

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FOREWORD

[The demand for good pictures is increasing. Editors and publishers are eager to use the best photographs that may be obtained. They draw no distinction between the work of the amateur and that of the professional photographer. In fact, if a photograph meets their requirements technically and artistically, they care little whence it comes. The opportunity to sell good pictures was never greater than it is to-day. With the desire to give our readers accurate and helpful information with regard to making the camera a profitable investment, we announce the publication of a series of articles on selling photographs by Frederick C. Davis. He is well-known to readers of PHOTO-ERA MAGAZINE, and is a practical photographer in addition to being an experienced professional writer. Mr. Davis has written the articles carefully in a non-technical style that will not bore the reader but will encourage him to make the most of photography. These articles are a practical, up-to-the-minute answer to the question, "How can I make my camera-work profitable?"—EDITOR.]

What It's All About



HENCE come the thousands of photographs used every month by newspapers and magazines? More than that, whence do the photographs come which are used by makers of calendars, postcards, for advertisements, and for illustrating books, stories and articles? At first thought, the answer is, "From professional photographers and publisher-photo-services." But professional photographers do not produce one-third of the photographs used, and publisher-photo-services are supplied by that same large number of camerists that supply

publications with most of their prints. No one can deny that the greatest number of prints published are bought from amateur photographers in towns no larger than the average, and sometimes smaller.

The camerist does not have to get in an airship and fly to Africa in order to produce photographs that will sell. Read what Waldon Fawcett says, himself a success at selling his photographs: "The photographer is apt to think that all his ambitions would be realised if only he could journey to foreign shores or to distant corners of our country; or if he could attend the spectacular events that focus the attention of the world now and then. *This is a delusion. The real triumph is that of the photographer who utilises the material ready at hand in his own district, be it large or small.*"

And more, a person does not have to be an expert photographer in order to succeed at the work. Here is what one prominent writer says about it: "The requirements of the field are well within the capabilities of even the beginner in photography, viz.; the ability to make good negatives and good prints, the ability to recognise news-value, and a methodical plan to find the market where the prints will find acceptance. The man or woman who can meet these requirements should be fairly successful from the beginning, and will open up quickly new avenues of special work and profit."

In short, inability to make metaphors, create lovely heroines or such is not at all necessary to the successful selling of photographs to publications. Is the field overcrowded? *No.* If there were ten times as many persons engaged in the work they could all keep themselves busy.

The field—how wide is it? Get out your map of the world. The field for *making* photographs extends from the top margin to the bottom, and

from the left to the right. The field for *selling* photographs—which is more to the point—extends over about five thousand publications, which use prints; not to speak of a few score of other markets.

The markets may be classified briefly:

- (1) Newspapers
- (2) Magazines
- (3) Postcard-makers
- (4) Calendar-makers
- (5) Art-study producers
- (6) Illustrations for books
- (7) Illustrations for articles
- (8) Prints for advertising.

And there are more, of more specialised branches.

And how does it pay? Please note: "A certain magazine once paid \$100 for four prints of sundials. An amateur, who happened to be on the spot with a kodak, made over \$200 out of a head-on railroad-collision. A New York professional netted \$125 from the newspaper-use of a wedding-party, of considerable local prominence, which was leaving the church after the ceremony." One amateur "realised \$300 a year for two or three years from a lucky snapshot of eight pet rabbits in a row." Recently a set of South-Pole photographs brought \$3,000 from *Leslie's* and \$1,000 more from the *International*. These all, though, are very exceptional instances. The average print sells for about three dollars. But there is absolutely nothing in the world to hinder a wide-awake person with a camera from making from several hundred to over \$3,000 a year from his prints. If he becomes a specialist he may earn as high as \$5,000 or even more. No discrimination is made between press-photographers. The person wins who "delivers the goods."

However, I do not mean that the instances of \$200 or so for prints should be taken as the prices ordinarily paid. I do not maintain that there is a fortune awaiting the man with the camera; but I do say there are unlimited possibilities for salable photographs and almost an unlimited number of markets for them. But there are not "barrels of money" in it, for all. A person may add appreciably to his income for having sold photographs; and having developed the trade to a high degree, he may cash cheques to the amount of \$5,000 or more a year. But not every one. Just some. And it isn't like the log and the falling off it. It's work—hard work—hard work.

Success at selling press-photographs does not depend on the size of the town you live in, the cost or manufacture of your apparatus, or on

your literary ability. It depends on you and your worship of the homaged gods of success if you would sell photographs. The gift of these gods is the ability to make good.

The Tools of the Trade

Have you ever wakened in the drear dead of a dismal night, possessed body and soul with a great desire—an uncontrollable, all-moving, all-consuming, maddening desire that knows no satisfaction—a desire for a new camera or a better lens? It is a sensation more disconcerting than that of the father who is detected by his small son in the act of rifling the latter's bank for car-fare. Never would I be so unwise as to cultivate that desire in any one; for that reason I do not here go deeply into a discussion of the best kind of camera for press-photography. Unless the camera you now possess is of a hopelessly mediocre grade, it will do very well.

A reflex camera is of course the ideal instrument for the purpose, for sharp focusing is so easy and so necessary. The high speeds of the focal-plane shutter incorporated into such a camera will rarely be utilised by the average user; but its other features are admirable.

However, the hand-camera of the folding type is supreme. It is so light it can be carried for a long time without fatigue; the user of one is inconspicuous when making exposures; the cost of operation as well as the original outlay is comparatively small—and there are several dozen more things in favor of it, including its greater depth-of-field, which is most important.

The lens is the heart of the camera, and some cameras have "heart-trouble." If you intend seriously to market photographs you should possess an anastigmat lens; not necessarily an F/4.5 lens, nor even an F/6.3 lens if too expensive; in that case an F/7.5 lens will do very well. An F/7.5 anastigmat is slightly slower than a rapid-rectilinear of U.S.4 aperture; but its excellence lies in its ability—as with all anastigmats—to form images of razor-edge sharpness, which is a prime requisite of a print intended to grace a page of a periodical. A rapid-rectilinear lens will do very well if you are always assured of sunshine or bright clouds to supply exposure-light—and in such conditions even the lowly single-achromatic lens will suffice.

Now you see I have agreed that virtually any lens that will form a sharp image will meet the requirements. Indeed, to paraphrase Lincoln: "For the sort of thing a lens is intended to do, I would say it is just the lens to do it." In other words, each lens has its limitations and abilities very sharply defined; and these limits the user must know and appreciate.



WHICH IS WHICH?

W. H. BROWN

And the shutter: it is folly to put a poor lens in a good shutter, and just as absurd to do the opposite. An expensive shutter with high speeds cannot be successfully used except with a lens capable of large aperture—otherwise under-exposure will result. A speed of $1/300$ second is the highest available in an ordinary between-the-lens shutter, and that is sufficient for almost anything. The slower speeds, as one-fifth, one-half and one second are in my opinion more usable than the extremely fast ones. Speeds varying from one second to $1/300$ second are embodied in two well-known shutters: the Optimo and the Ilex Acme. The one is on a par with the other. But no such high-grade shutter is needed unless the high speeds are necessary to the user, for the slower speeds may be given with the indicator at B. But enough! This is not a manual on the elements of photography.

The requirements of the apparatus to be used for press-photography are that the lens produce a sharp and clear image, the shutter work accurately, and the whole be brought into play quickly.

I have used every sort of camera; reflex, 8×10 view, 5×7 view, hand-cameras with anastigmat, rapid-rectilinear and single lenses, and box-cameras, and they are all entirely satisfactory "for the things they were intended to do." The camera I have used most and which is my favorite is a Folding Kodak, that makes $3\frac{1}{4}$ by $4\frac{1}{4}$ photographs, and is equipped with an Ilex Anastigmat working at F 6.3, in an Ilex Acme shutter. To this I have added a direct-view finder for reasons apparent to any one who has tried to

photograph high-speed subjects by peeking into the little reflecting-finder. This camera has served me admirably for interiors, flashlights, outdoors, high-speed work, portraiture, and anything else to which I have applied it. Your own camera should do the same for you.

A photographer comes to know his camera as a mother knows her baby—and if he doesn't he will be no more successful than the mother who does not understand her child. The camera-worker must forget all about manufacturers' claims and should judge his tool by experience; he must ignore most of the theory and rely wholly on practice. In short, he must know his camera inside and out, what it will do and what it will not do; everything must be at his finger-tips ready for instant use. Coupled with that is the need of the ability to produce, sometimes, within an hour after making the exposure, crisp, sharp, sparkling prints.

After all, no more qualifications are required of the press-photographer than of most other photographers. He may have to work like lightning, snap his shutter literally under the very hoofs of racing-horses, rush out of a warm and cozy bed into a chill and bleak night—but "it's all in the game." If any one of the old veteran press-photographers were to lead the life of an ordinary business-man, he would die of ennui. When the camerist makes photographs for publishers it is zip-dash—and later, cash. It is the exciting life of a never-sleep reporter, with a camera to manage instead of a pencil.

(To be continued)



ON THE QUAY, PAPEETE

DR. J. MOIR DALZELL

A Pearl of the Pacific

DR. J. MOIR DALZELL

SINCE Stevenson and Conrad beguiled us by the call of the South Seas there has been, among the ingenious writers who maintain the circulation of our popular periodicals, an ever-growing tendency to exploit those far-flung fragments of a long-forgotten continent which dot the Southern Pacific Ocean. Nor need one greatly wonder at this fashionable cult of the torrid zone. A fringe of feathery foliage, silhouetted against the glowing crimson of a tropic sunset, is a much more fascinating fabric than the painted paling around a city park. What fitter setting could one choose for the twin-souled

fervor of a modern magazine-romance than some distant, dreamy isle amid soft-hued, summer-seas where the long line of sonorous surf, breaking in foamy broinery on a coral reef, sings its ceaseless lullaby across a blue lagoon to lofty palm-trees swaying beside the glistening sand; where the plash of limpid brooks is borne on scented air through fronds of giant ferns; where garlanded erags and dizzy precipices lead the eye up to mountain-summits floating serene above the pageantry of the cloud-rack?

Such, at any rate, was my own notion of real South Sea Island scenery. To others, who doubtless have formed similar ideas and aspire to their



PAPETE
ON THE SHORE, TAHITI
DR. J. MOIR DALZELL



RUE DE RIVOLI, PAPEETE

DR. J. MOIR DALZELL

expression through the medium of photographic art, I would commend that sea-girt fairyland, Tahiti. Its pretty little capital, Papeete, of just over three thousand inhabitants, and some twelve days from San Francisco, is a regular port of call on the direct Royal Mail Route between Western America and Australasia.

Tahiti—or Otaheite as it was formerly styled—is a hundred and thirty miles in circumference and has a population of nearly eleven thousand. It is the largest of the eleven Society Islands, so called in honor of the Royal Society of London who dispatched to Papeete a scientific expedition under the command of that intrepid navigator, Captain Cook, to observe the transit of Venus over the sun's disc in 1769; but the island was discovered by the Spaniards a century and a half earlier. Since 1843, its fortunate possessor has been

France. The only noteworthy event in its more recent history was the bombardment of Papeete by two German cruisers in 1914; but no trace is now visible of the damage; nor have the inroads of western commercialism yet done much to mar the natural charm of the island. Outside Papeete there is really little, save the sound of an occasional automobile on the highways, to dispel the illusion of old-time Polynesian life in all its primitiveness; our Gallic cousins have been admirably unaggressive.

Guarded by a beautiful coral reef, the more densely populated end of Tahiti is sheltered from the trade-winds by a very impressive range of high mountains. Over all looms the double-peaked Orohena, towering eight thousand feet above the sea, with ever-changeful arabesques of cloud clinging around its jagged shoulders. From

time to time, great white billows roll down the mountain-side to lie along the forbidding walls of a somber gorge. Sunlit, upland valleys melt away in the mists and shadows of yawning cañons whose tones of gray and purple take on fresh nuances with every cloud that passes over them. The coast is bordered by a broad belt of inexhaustible fertility yielding every tropical fruit known to the world; and Papeete, by the water's edge, its white walls and its two rival steeples gleaming in the sunshine, lies nestling in thick woods aflame with scarlet flowers. Should

Xpres that worked at F/4.5, and an F/6.8 Ross Telecentric of 9-inch focal length, interchangeable in the diaphragm-shutter. A set of Wratten "K" screens was an essential part of the equipment, not only for a correct rendering of color-luminosities, but to cut out glare and excessive reflections from glistening objects. Another most necessary adjunct was an ample lens-hood. The use of such an appliance is required with every modern anastigmat and telephoto-objective at large apertures, and ensures a brilliancy of image otherwise seldom attainable.



QUAI DE L'URANIE, PAPEETE

DR. J. MOIR DALZELL

it be your good fortune, as it was mine, to gather your first impressions of Tahiti on a radiant, June evening, you will not readily forget them.

One hears much of the difficulties attendant upon photography in the tropics; but, provided one takes a few simple precautions, the climatic conditions of Tahiti offer no obstacle to success. Although the temperature is high, it is pleasant on account of its equability. January is the hottest month, when the day-temperature in the shade seldom touches ninety degrees, and the coolest month is June, when eighty degrees is about the average. There is no set rainy season; but December and January are wet.

My camera was a $3\frac{1}{2} \times 2\frac{1}{2}$ Newman and Guardia "Sibyl" of luxurious lightness under tropical conditions, and adapted to either plates or film-packs. I used two lenses, a $4\frac{3}{8}$ -inch Ross

Dawn is fleeting in Tahiti, and dusk gathers quickly; but early morning and late afternoon are the best times to obtain pictures. During the greater part of the day, the illumination is too arrogant, the contrasts too extreme; for most of the subjects will present adjacent masses of deep shadow and dazzling highlight. Beware of under-exposure. Tropical foliage has an almost uncanny capacity to mop up actinic rays. A reliable exposure-meter should always be carried.

There is a saying that, if anything is going to do one good, one cannot get it too soon. This applies with peculiar force to the development of plates; and more especially to that of films, exposed in tropical countries. With regard to ocean-travel, it should always be remembered that sea-air has a much more deleterious action on undeveloped emulsion that has been impressed



A SOUTH-SEA ISLANDER

DR. J. MOIR DALZELL

with a latent image than on the virgin product. Two stores in Papeete stock the more popular sizes of Kodak roll-film; but I would strongly advise the camerist to import his own photographic supplies.

Before leaving home, in Scotland, I had all my sensitive material, consisting of Premo Film-Packs, backed Wellington Anti-Screen and Wratten panchromatic plates, packed in tins-cases with slip-on lids sealed by adhesive rubber-tape. All my exposures were tank-developed on the spot with Rodinal, on the Watkins thermotime principle; and my darkroom was a small, collapsible changing-tent with a hinged top and an arm-hole at each end. This procedure is really much more simple than it sounds; and so signally satisfactory did it prove to be that I shall certainly stick to it during future travels. Although the developing-solution frequently sent the thermometer up to seventy-five degrees, I found no trouble in Tahiti on account of frilling; which immunity I mainly ascribe to using a fixing-bath of exactly the same temperature.

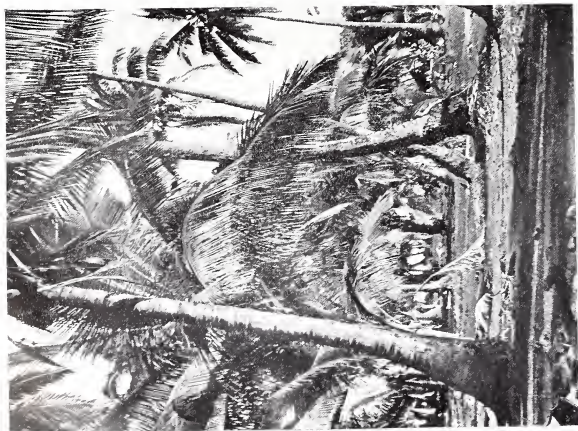
So much for tropical technicalities! But let me add one final "tip." Never dry *small* glass-negatives in the plate-rack of commerce. If you do, even with a couple of vacant grooves between them, they will most likely show some tantalising patches of unequal density. And, such is the inherent perversity of inanimate objects, that the aforesaid blight will always evince a sure, selective affinity for your pet pictures.

Papeete would be a fitting capital for the fabled land of the Lotus-eaters where care is unknown. It is a lively enough little port on steamer-days; but, when the boat has gone, silence once more creeps down from the hills. The thoroughfares leading off the harbor-front—a long avenue of shady trees beside a fleet of trim, white schooners from remote islands—are often quite deserted for half-hours at a time. The quiet of the noon-day-siesta is broken only by the distant boom of the surf on the coral reef and the occasional pat of bare, brown feet on the roadway. Patient, slant-eyed Chinamen sit silently in the doorways of their deep, dark shops. Now and then a group



"WHERE THE LONG-BACKED BREAKERS CROON
THEIR ENDLESS OCEAN-LEGENDS TO THE LAZY,
LOCKED LAGOON."

DR. J. MOIR DALZIELL.



FRINGE OF THE LAGOON



DR. J. MOIR DALZELL



DIADÈME RIVER, TAHITI

of native women, each with a flower—the pale, waxen *Tiare-Tahiti*—in her flowing, jet-black hair, will glide slowly across the dappled pools of the sunlight that comes glinting through the leafy canopy overhead. Here and there are great trays of vanilla-beans spread out to dry, and many of the low-set dwellings are embowered in a gorgeous riot of unfamiliar blossoms, bewildering in the brightness and variety of their colors. Papeete holds wonderful possibilities for the Autochrome-process.

The early morning-market is a most attractive scene. Sugar-cane, cocoanuts, pineapples, oranges, breadfruit, guavas and other products of the island, together with sundry scraps of meat of suspicious age, are assembled in profusion; and around them laugh and chatter a throng of soft-eyed Tahitians, graceful, light-hearted and merry—still the South-Sea Islanders of a hundred years ago. Semi-civilisation has done little more than put a period to their cannibalism and a few more clothes on their bodies.

One should make one's headquarters in Papeete. There are two hotels of which the preferable is the *Diadème*. A smattering of French will carry you along all right. The furnishings of your room may be somewhat scanty—merely a chest of drawers, a bed, a wash-basin, a bucket and a patch of matting on the floor. Meals are served on a broad veranda, the favorite dining-place of the French, American and British colonies; and seeing that the inclusive terms last year were only

nine francs per day, *vin compris*, the worthy *patron*, M. Louis, is assuredly no profiteer.

The best way to travel about Tahiti is by automobile, and there is no trouble to hire one. In all directions you will find pictorial plenty. From the road leading west along the shore—an avenue of cocoanut-palms, mango and vanilla-trees—there is many a charming glimpse of the neighboring island, Moorea, with its fascinating sky-line; and numerous side-tracks from the highway give access to exquisite vistas of river and mountain-scenery. Long stretches of the wayside are lined by crimson hibiscus, beautiful hedges of lantana, and white gardenias with their heavy fragrance; the scarlet chili-pod grows rampant; and orange-trees dangle their golden fruit.

The trip to Venus Point should on no account be omitted. From Papeete the road winds upward several hundred feet, through twilight-arches of gigantic frondage, and then dips to the headland where Captain Cook made his famous observation. A memorial to his honor has been erected there by the Royal Geographical Society, and the Point Venus lighthouse, built in 1876 by Pomare IV, the last Tahitian monarch, stands near-by. Far below, the great sweep of the blue Pacific breaks into all the varied shades of turquoise and of emerald among the coral reefs. Above is the eternal dome of heaven; and around are gently waving palms—"silent sentinels of the Southern Seas."



Camera and Character

MANKIND is a mine inexhaustible, and the exploration of that mine always yields some profit to the photographer, be he seeker after beauty, or student of men and women. A photograph is much more to the man taken than to the taker. Accordingly, a wise man destroys many plates, for a broken plate may save a broken friendship. Photography is an absorbing pursuit, but if it costs you a friend you have paid too dear for your whistle. With the bold lovers of truth, those who like Cromwell want the wart on the nose, there is no difficulty. They know that little mannerism is a bad one; they know that trait which the camera reveals is in the character, and don't mind acknowledging it. The average man and woman want a "nice" picture, and put niceness ahead of truth. It is a bit of that self-deception with which most of us go through life, a light cloak that a gust of truth blows aside; but

which does well enough in fair weather. Thus in photography, as in other pursuits, the moment we touch human beings we enter into the realm of moralities. No photographer can ignore it. And as a building arises out of many bricks, so out of his numberless observations a fine structure of solid knowledge is erected. If the proper study of man is mankind, no one can surpass the photographer in opportunities for such study. A sitter sometimes shows more of himself in five minutes than in five hours. In those minutes a short study may be made which reveals the essential, the often unseen bases of character. The face may be all that goes to the plate; but the sitter's mind often goes into that mental portrait gallery which the man with the camera is forming, for though he began with the sole notion of becoming a photographer he ends by becoming one who knows—in short, a philosopher.

Oldham Chronicle.



FIGURE 1

Experiences in Stereoscopic Photography

A. JUPENLAZ

MOST persons over forty years of age, when harking back to the days of their youth, remember the stereoscope and the set of stereographs which helped to adorn the parlors in most homes of the land. Some of the views were excellent, others passably good; but too many were supposed to illustrate more or less funny stories or situations, and appeared to be made from cross-eyed folk in that a person blessed with normal eyesight could not look at them without severe strain of the eyes. This latter type of stereograph is to a great extent responsible for the present day neglect of this interesting and beautiful branch of photography.

It is not intended to give directions for the production of stereoscopic pictures or transparencies but to bring to the attention of amateur photographers the wonderful and interesting possibilities of this phase of the art, and, by relating my experience with it, to aid the beginner in the selection of the apparatus required for its practice.

Many amateurs, even as myself, have made hundreds of pictures good and otherwise, have shown them to their circle of friends and acquaintances and have reaped their flattering comment. Some of these prints we have pasted in albums,

others adorn our walls, still others are packed away somewhere. The latter will probably never be resurrected and they form the majority of our production. I am not speaking of the beginner who, with his new camera, snaps at everything he sees, but of the camerist who goes out on his holidays to enjoy the beauties of nature and who, viewing a beautiful woodland-scene, or a landscape as seen from some mountain-crest, would like to record their charm. He makes the pictures, returns to his home impatient to develop and print his treasures to find that the first picture is a mass of uninteresting detail, and the latter shows a dark mass of grass or rock surrounded by a light haze through which nothing of interest can be seen. The sense of being in a shady woodland-dell or on the lofty mountain-peak which had acted on his emotions is entirely absent in the pictures. They fail to bring back to him the joys of the "days of old lang sync" and therefore are packed away "somewhere." Had he made these views with a stereoscopic camera he could have enjoyed the shady dell or the lofty mountain-peak at any time he chose. The illustrations submitted herewith (Nos. 1 and 2) should make my point more clear. Viewed through a stereoscope they are

all that can be desired, although without merit as a single picture, although No. 1 could be enlarged with profit.

The above remarks should not be taken as belittling the work of the camerist with his box-camera or more pretentious instrument, which makes single pictures, for it must be conceded that one of the disadvantages of the stereogram is that a stereoscope is needed to view the picture. For the advanced photographer who delights in artistic productions the stereo-camera is of little value, although the larger types such as those making pictures $3\frac{1}{2} \times 3\frac{1}{2}$ can be used very well for enlarging.

tion to be decided by each one according to his pecuniary standing; but in this case the smaller sizes require as a rule more expensive apparatus than the larger sizes. As to size of stereograms produced, the cameras now in general use may be classified under three different sizes. I will discuss each in turn and then relate my personal experience in the use of them.

Commencing with the smallest size it may be stated that all those I have seen are of foreign make. They produce a picture 4.5×4.5 mm. or $1\frac{3}{4} \times 1\frac{3}{4}$ inches, approximately. The two pictures of which the stereogram consists are printed side by side and the total size of the print



FIGURE 2

Now I wish to make a few remarks as to the choice of apparatus. As is the case with ordinary cameras, there is a great variety of styles and sizes. In the choice of the lens and shutter-equipment the state of the pocketbook of each individual must be the principal consideration. Get the best if you can afford it; but in this connection it may be stated that the speed of the lens is not so important in this class of photography as in the others. Since a stereograph should be in sharp focus all over, it follows that a large lens-opening is not desirable except in the smaller sizes of stereo-cameras which are provided with very short-focus lenses. I consider a lens-speed of F 6.3 or F 7.7 ample for most requirements.

The choice of the size is, of course, also a ques-

or transparency is $1\frac{3}{4} \times 1\frac{1}{4}$ inches or 4.5×10.7 mm. (See illustration No. 3.) Owing to its small size it is desirable that the camera be equipped with a first-class lens, as the stereogram must be viewed through a stereoscope which greatly enlarges the original in order that the picture may appear nearly life-size. Transparencies should be made with this size as paper-prints have a tendency to show grain by the enlarged view required. If this is done the results obtained leave nothing to be desired.

The next in size produces stereograms 6×13 cm. or 2.25×5.15 inches. The remarks made concerning the smaller size apply also to this one, but as they do not need as great an enlargement by the viewing-apparatus as the former, a somewhat less expensive lens can be used in the



FIGURE 3

camera without jeopardising the excellence of the final result. (See illustration No. 4.)

Next to the above in size is the standard American size, about $3\frac{1}{4} \times 6$ inches. This is the largest possible size, as the distance between the figures in the two pictures mounted side by side cannot exceed 3 inches at the most. (See illustration No. 5.) Due to the size of the pictures the lens-separation in this class of cameras is somewhat

and as the enlargement required is moderate, the prints show up without grain and without undue exaggeration of the little spots or other defects which sometimes mar the effect of a stereogram. There is a great variety of cameras on the American market to make this size of pictures. Many are so constructed that they may be used for single pictures up to 5×7 inches in size. The prices are very moderate and the less expensive



FIGURE 4

in excess of the theoretically correct distance which is estimated at about $2\frac{1}{2}$ inches, that is the average distance between the eyes of the normal person. Although this causes a slight exaggeration of relief it is not enough to be detected, and may be considered an advantage rather than a disadvantage, as it has a tendency to increase the effect of the views. This size is well adapted to the ordinary stereo-print. The stereoscope to view them is inexpensive

ones may be depended upon nevertheless to do excellent work.

The pictures illustrating this article were all made with a Stereo-Hawkeye No. 4. Many years, I have had no other camera in my possession and only lately have I had this camera equipped with a pair of anastigmats. Most of my work has been done with the lens originally furnished, rapid rectilinears. I have found the $3\frac{1}{4} \times 6$ size well adapted for an all-around camera.

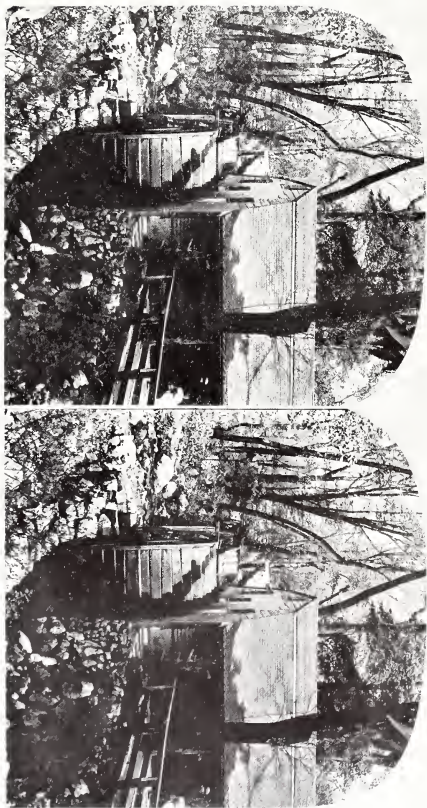


FIGURE 5

Each single picture being $3\frac{1}{4} \times 3\frac{1}{4}$ it is well suited to enlargements up to 11×4 inches and I have made many such enlargements from them. Even without enlargement, the pictures are of ample size for use in an album or for postcards. On the latter, a space is left on the side for correspondence. Another point of advantage is the fact that the usual size paper-stereogram stands considerable rough handling and can be shown in a mixed company or to children without the danger of breakage or scratching which is an ever-present source of danger to the delicate glass-transparencies made with the small camera. But here let me state that there is one serious disadvantage connected with that very versatility of the paper-

picture, in the two smaller sizes, transparencies, in the larger one, a paper-print. Of these three samples, only one was passably good, the other two simply impossible. The paper-print was not straight on the mount. This defect alone will render any stereograph worthless. The other defective picture showed the works of a watch and was evidently made with too much separation between the lenses. It must be explained here that the usual separation of lenses in stereo-cameras is correct for any subject at a distance of several feet from the camera; but when very near subjects are made, the separation must be decreased if a pleasing and visually correct view is desired. Now what I wanted to say is, that

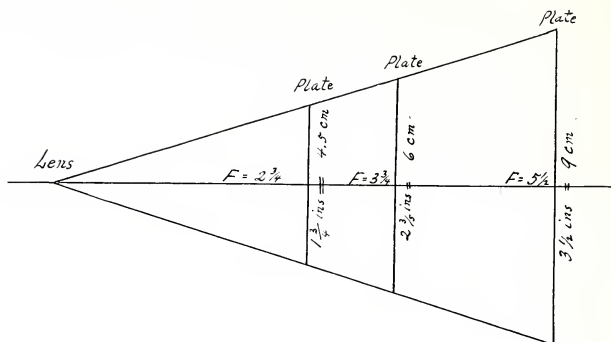


FIGURE 6

stereo. It is very often kept in service after it has been spoiled by rough handling and becomes a source of annoyance instead of pleasure, for nothing displeases more than a stereogram filled with scratches. It not only fails to please, but causes strain to the eyes, preventing any enjoyment in the process. A stereograph should be very close to perfection: if it is not, it should be discarded immediately. Should the scene be of importance as a record of some event, and if there is no possibility of its being re-made, it can be retained as a single picture but should not be shown as a stereo.

A few days ago I went into one of the largest photo-supply houses in New York. At the camera-counter I found stereo-cameras of all kinds and makes. On the top of the counter were stereoscopes to view the three sizes specially mentioned in this article. In each one was a

any one entering the store and looking over the samples mentioned will naturally conclude, that, if the supply-houses with a reputation for the excellence of their materials cannot turn out more than one good stereo out of three, it must be a difficult art; but let me assure the reader, only absolute carelessness will spoil a stereograph.

Now to sum up my experience with stereoscopic photography. With the camera I have mentioned or with any other similar type you can make most beautiful stereos of the regular larger size on paper. These are not expensive, will bear rough handling and can be replaced by new ones at small cost. You can use the camera as a single-picture camera by capping one of the lenses, the prints obtained being large enough for contact pictures for your album, or you can enlarge them to a considerable size. You can make transparencies instead of prints, and I

Development After Fixing

A. STREISSLER

THE remarkable phenomenon that a photographic plate, fixed immediately after exposure until it looks like a piece of clear glass, can afterwards be developed with a suitable developer, has long been known. The general practical use of this method, however, as is usually the case with new discoveries, at first encountered a number of difficulties; but recent improvements in the process have rendered development after fixing quite advantageous for certain purposes, and it is hoped that it will be further perfected so as to be capable of more general use. A brief sketch of what has been done so far in this direction may be of interest.

First it must be emphasised that the method of developing dryplates that are fixed immediately after exposure must necessarily be different from that employed with plates that are developed before fixing. The silver bromide—that is, the material which upon treatment with the developer gives the substance of the negative—is removed by the fixing-bath, and an image can then only be produced by supplying physically the material necessary to form the picture. In fact, this reproduction of the image is effected by placing the fixed plate in a bath containing silver and which will readily part with this metal; for the exposed portions of the primarily fixed plate—notwithstanding that they are indistinguishable by the eye from the unexposed parts—possess the property of separating very readily the silver from the developing-bath containing it, in proportion to the amount of exposure received by the different portions of the plate.

But what advantage is there in development after fixing? First, this mode of procedure enables us to develop the plates outside the darkroom, for the primarily fixed plate is no longer affected by the light. Besides, the correct measurement of the time of exposure—provided a certain minimum is given—can be arranged without difficulty, as, strange to say, the exposure can be extended almost at will without changing the result. Lastly, the negatives obtained are comparatively fine-grained. These noteworthy advantages are, to be sure, not without their drawback: the least admissible exposure is quite long, and this circumstance excludes it from use in a great many cases. Nevertheless, it is a fact that there is scarcely any limit to the time of exposure, which makes it very suitable occasionally for inanimate subjects. It is also

worth noting that the improvements described further on have made it possible to shorten more and more the time of exposure, so that it is to be hoped that further investigations in this direction may lead to additional curtailment which will widen the field of usefulness of the method.

Neuhaus, a German, was one of the first to describe the process of fixing the plate primarily. He succeeded in obtaining equally good negatives with a correctly exposed plate and with one exposed sixty times as long. But his development was extremely slow, requiring about twelve hours; he obtained, however, a fine, printable negative and concluded that the process possessed a decidedly practical value.

Starting with Neuhaus's method, the Brothers Lumière and A. Seyewetz experimented in the same direction. They first set themselves the task of shortening the somewhat lengthy exposure-time required by Neuhaus, and found that the strength of the fixing-bath was of controlling importance; the stronger it was, the longer exposure it required. In order to obtain the shortest time of exposure, therefore, the weakest possible solution of hyposulphite must be used—not more than two per cent. In this case, with slow plates, an increase in exposure of only four times that required with ordinary development was required; with highly sensitive plates about six times normal exposure was necessary.

For the physical developer these investigators used the following:

(A) Water.....	150 ccm.	5 ozs.
Sodium sulphite (dry).....	27 grams	1 oz.
Silver nitrate.....	11 "	170 grains
(B) Water.....	100 ccm.	3½ ozs.
Sodium sulphite (dry).....	2 grams	30 grains
Paraphenyldiamin....	2 "	30 "

The paraphenyldiamin can be replaced by an equal quantity of metol, hydroquinone, or pyrogallie acid. These latter give a more rapid development; but have the advantage of a less stable solution, so that the silver soon precipitates, causing fog. To develop a 5 x 7 plate, take five ounces of A and one ounce of B. The speed of the developer can be increased or diminished by varying the quantity of the developing agent correspondingly; but such modifications cause changes in the color of the silver deposit. It is also to be noted that the quicker the developer, the more unstable it is.

The Lumière Brothers and A. Seyewetz further



THE STRUTTER
JOHN SMITH

experimented to determine how far it is possible to substitute the silver by some other metal, and found that quicksilver alone was suitable, and they consider the latter superior to silver, in certain cases. A mercury-developer is not so apt to give dichoric fog. It gives a thicker deposit and shows less inclination to precipitate, and is therefore less apt to produce foggy negatives when development is protracted. On the other hand, the mercury is slower and more contrasty. The following formula was used and is recommended for use by those amateur or professional photographers who are interested in the subject and who wish to experiment:

(A) Water.....	150 ccm.	5 ozs.
Sodium sulphite.....	37 grams	1¼ oz.
Mercury bromide....	1.5 "	23 grains
(B) Water.....	100 ccm.	3½ ozs.
Sodium sulphite.....	2 grams	30 grains
Metol.....	2 "	30 "

For a 5 x 7 plate, take five ounces of A and one ounce of B.

Fixing should in all cases be done in a two per cent hypo-solution. With slow, fine-grained plates a saturated solution of sodium sulphite is also suitable for fixing, but with more sensitive plates is not advisable on account of its slow action.—*Das Atelier*.

A Brief for the Amateur

SIGISMUND BLUMANN



THE amateur, in any branch of art, is the material from which the art-lover is made. He represents the pure, idealistic love of the thing without hope of or desire for recompense. What he actually produces in the nature of whatever he adopts as his special object of affection is little, sometimes mediocre—sometimes worthy of the highest esteem. If that work be inferior, let us condone it; for it is aside from the daily occupation, being done in hours stolen from leisure, rest, and what others would call pleasure. If it be praiseworthy, more honor there.

But the amateur's higher place is as of the class who by patronage, appreciation, idealism and lack of sordidness, encourage the professional, advance the standards, and encourage, always encourage. These dilettanti are the advance guard of public culture. They lead the taste. They are the incentive and the inspiring stimulus.

From the ranks of the amateurs many of our greatest artists have risen and in their masses many a great artist remains submerged. So let us respect the class; for they are enough our betters in idealism to compensate for their inferiority in execution. After all, if every one produced, there would be no consumers; and, if every one rose to excellence, there would be no distinction in attainment.

Then, too, may we temper our judgment with mercy, remembering that many a voiceless soul aches to sing, many an untrained hand longs to

paint. Inspiration wells within the souls of men who have no methods, no means of expression. The Muse whispers to them and they understand but cannot answer. If in striving to give forth what the inner urge commands, they halt and fail, do not laugh or allow contempt to animate your mood. Gray's Mute Milton is before you.

It takes a million striving daubers to make one Rafael, a million piano-tinklers to make one Paderewski, a million like myself to produce one real photographer. The secret is out. I present a brief for my own class. In photography we seldom succeed in making one real picture. We spoil thousands of dollars' worth of material, thus subsidising the manufacturers who thrive thereon and make the things you need for your achievements. We are insatiable in our demands and spur those makers on to ever better things. Often, we discover and invent. And we enjoy, how gloriously we do enjoy, your better productions.

Whatever we are, we are not to be compared on the same basis with professionals; but we rise above the status of the merely tolerable. We are better than the essential. We stand for the spirit of the thing. Art is to us not a sweet-heart to hold and fondle, nor a good mother who provides, but a vision, a spirit, an insubstantial, almost irresponsible, only partially realised deity whom we adore.

Well! If not quite all of that, we are at any rate a contingent which, in number and potent influence, the profession cannot ignore.

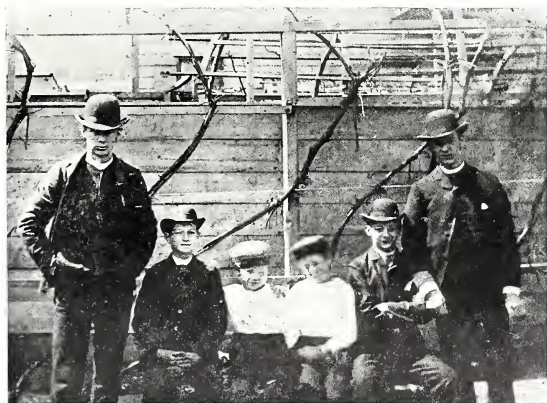
My First Photograph

WM. H. ZERBE

Number Five

THE Editor has paid me the compliment to be one of a number of old-time photo-pictorialists to give their experience in the making of their first photograph, with a copy of the same. When the photographic bee first began to buzz around me, I was employed in the works of Andrew Prosch, who, with his brother George,

me. Working for a small salary, I could not afford to buy any of the amateur-outfits then on the market, so I bought a Scovill & Adams double plateholder and built a complete outfit around this. The bellows was not of the accordion type, but just a plain, collapsible cone. For a lens, I bought a second-hand opera-glass, mounting one of the large lenses in a brass tube.



MY FIRST PHOTOGRAPH

WM. H. ZERBE

made the first photographic camera in this country. This was for Prof. Samuel F. B. Morse, the inventor of the telegraph. At this time, George Prosch had long been dead, but Andrew continued the business, making various kinds of photographic apparatus for E. & H. T. Anthony & Co., Scovill & Adams Co., and others in the photographic supply-business. Besides doing work for these regular firms, quite a large business was done in making special apparatus for a number of wealthy people who had taken up amateur-photography, since the advent of the dryplate, as a hobby. These amateurs used to congregate in our shop and talk photography, and show and exchange pictures.

Being in this photographic atmosphere constantly, it was but natural for the bug to bite

My shutter was of the drop-shutter type, arranged so that it could be opened and closed with a string operated at a distance. With this outfit operated in the manner described, the accompanying photograph, my very first, was made. The photograph shows myself and five brothers. The youngest shown in the picture is now the father of a family of six, one of whom has put in his first vote. The picture was made, to be exact, in 1883.

The pleasure and enthusiasm I had in building the outfit was no comparison to the thrills I had in making the first exposure and developing the plate. The time of exposure was purely guess-work, for there were few instruction-books to be had at that time. I was fortunate to get some kind of a negative, because I had used a



"WEARILY WENDING THEIR HOMEWARD WAY"

WM. H. ZERBE

Carbutt B plate, which was a fairly slow plate with considerable latitude. I used the developing-formula that came with the plates, which was pyro-ammonia.

In each step in the making of my first picture, my impatience to see a finished print kept increasing so that at the culminating stage it was at the breaking-point. One could not buy printing-paper then so easily as nowadays. I tried to buy some sensitised albumen-paper from several studio-photographers, but was refused; so I obtained from a friend in an architect's office some blue-print (ferro-prussiate) paper, on which my very first negative was printed. Since then, I have made pictures that were printed on carbon, gum, platinum, bromoil, and other processes, and which have brought Salon honors and money-prizes; but I have yet to make the picture that will give me the pleasure like this blue-print from my first negative.

[Mr. Zerbe states that, professionally, he continued as a technician with the Prosch firm for some years, and, by reason of his eminent technical and artistic knowledge in the practice of photography became an instructor and lecturer in the photographic section of the Brooklyn

Institute of Arts and Sciences. He is also active as staff (official) photographer on a leading New York newspaper, where his pictorial skill frequently finds adequate artistic expression. The following is only a partial list of the medals awarded Mr. Zerbe for special pictorial merit: Genoa, 1905; Amsterdam, 1908, and Budapest, 1910. His pictures have been hung in the annual salons of the Royal British Photographic Society, London, Copenhagen, Turin, Toronto, Pittsburgh, Los Angeles, Portland (Maine), and others of less importance. Mr. Zerbe began to contribute specimens of his pictorial work to PHOTO-ERA MAGAZINE seventeen years ago, participating, and successfully too, in the PHOTO-ERA Third Annual Photographic Contest. These and other important pictures, by Mr. Zerbe, have appeared in these pages as follows: 1905, January, "Toilers of the Soil," "Returning to the Fold" (landscape with flock of sheep), and "Path to the Woods." The foregoing are prize-pictures: July, "Just as the Sun went down" (landscape with homestead), and "A Country-Road" (first prize in landscapes); 1906, January, "The Potato-Harvest" (first prize in landscapes with human interest,

PHOTO-ERA Fourth Annual Contest), and "Flying the Kite" (from the Postal Photographic Club); 1907, April, "The Dawn of Day" (cows fording a creek), from the Third American Photographic Salon, "Shady Waters," from Salon Club of America, and "Early Morning-Mist," from the Third American Photographic Salon (praised for its beauty in pictorial composition); 1908, January, "The Winding Path in the Golden Gloam" (from the Fourth American Photographic Salon), February, "A Song of a Summer-Day" (exquisite wood-interior), May, "The Drinking-Place" (cows in stream), and September, "Cool and Shaded Waters"; 1909, January, "Wearily Wending their Homeward Way" (prize in Animal Class, PHOTO-ERA Sixth Annual Contest, and republished in this issue), "Woodland-Brook" (prize in landscapes, same contest), and "Sunshine through the Mist" (landscape);

1912, December, "High Bridge" (second prize in "Bridges" competition); 1913, April, "Twilight after the Shower" (landscape at dusk); 1915, September, "Mr. Gouverneur Morris" (interior with figure) and "The Jardin de Danse" (dancing couple illuminated by concentrated light)—pictures accompanying Mr. Zerbe's essay, "Pyro-Acetone Developer as a Preventive of Halation"; 1919, February, "Through the Gates of St. Paul" (from Second International Los Angeles Salon); 1920, April, "Boat-Landing" (Third Los Angeles Salon). Like the pictures published in PHOTO-ERA, by the authors of this interesting series, "My First Photograph," this list of pictures by Mr. Zerbe will repay the effort of art-students and ambitious photo-pictorialists to look up and study. These pictures will be found to be examples of pictorial composition worthy of emulation.—EDITOR.]



It is All In How You Sit

BAD POSTURE CAUSES THAT FAGGED CONDITION

THE Bureau of Women in Industry of the New York State Department of Labor has issued a special bulletin entitled, "Industrial Posture and Sitting." It is suggested by the Bureau that "the seat that never wears out" may be "the seat that wears the worker out." Elimination, so far as is possible, of the fatigue caused by bad posture or continually working in one position, is the base of the Bureau's study. "There is no doubt," says the bulletin, "that bad posture reduces the worker unnecessarily and quickly to a fagged condition, in which his hand moves with less accuracy and his mind wanders from his task. Fatigue produced by such a cause is, in a large measure, preventable."

The following general questions and recommendations are made:

"FIRST: The posture must be varied; continuous sitting and continuous standing are both harmful. Ideally, conditions should allow the worker to vary his position at will, because of the rest and the enormous saving of energy that come from a change of position during working-hours.

"SECOND: Working-conditions should be such that correct posture is possible, (a) by providing a physiologically good chair; (b) by ensuring a proper relationship of the different parts of the work-place to the worker.

There is no one chair that is best for all indus-

trial processes. To determine what chair is best for a particular process, the nature of the work to be done, the position of supplies and finished work, the equipment at hand, *i.e.*, the height of bench, chair, place for footrest, as well as the height of the individual worker—all these must be considered. To provide a good chair, is not enough; the important thing is to bring all parts of the work-place into the best possible and most convenient relationship."

The above is recommended to the attention of retouchers, whose work is arduous. Not only is it a constant strain upon the eyes, but it is apt to be detrimental to the health of the worker who, day after day, sits in one position and, at the same time, enjoys no change of air. The intelligent retoucher, one capable to understand the physiological drawbacks of this unchanging activity, will appreciate the foregoing remarks made by the Bureau in its bulletin, and without any special direction be able to adapt herself intelligently to the conditions under which she works. Of course, a seat or chair must be chosen that shall yield the most comfort while working, so that the retoucher shall not feel unduly exhausted after her day's work. It seems possible for the retoucher to perform her tasks without a detriment to her health, provided the conditions be of the best, *i.e.*, with regard to light, air and posture. Needless to say, health is of vital importance. Those who engage in occupations of a sedentary character will do well to give the matter of posture careful attention.



MINING TOWN

EDWARDS W. DONALDSON

Photography in a Coal-Mine

EDWARDS W. DONALDSON



AND COAL-MINE must be entered to be understood. Persons who have been in them, excepting the miners, engineers and owners, are almost as rare as presidents of the United States. The first undefined fear which comes from being hundreds of feet beneath the surface, in the deadly silence and clammy darkness of a mine, slowly changes to a positive liking for its restful silence and its cool, mineral odor. Sometimes, a ponderous mass of slate sends out its warning spitting-sound and falls with a crash; sometimes, the pockets of gas which form in the hollows of the roof, explode abruptly, and sometimes men are killed with ghastly suddenness. But with a passing thought for these, the men come to their work with a smile and a song; and—as the outside world, with its glare of sun or blanket of fog, goes merrily on—they push the narrow tunnels deeper and deeper into the strata, miles from the little square of daylight.

The hole in the hill—beyond which the outsiders' imagination pictures anything from a haphazard tunnel that runs a rambling, carefree course beneath the ground to an immense cave—leads in a straight line until it strikes the coal-seam and there it connects with a network of cross streets, main streets, and intersecting thor-

oughfares which would amaze the average person with the similarity to a city street-system. Nothing is haphazard; the company knows to a certainty, by means of precise surveys, every bend of the tunnels, and every characteristic of the mines is shown on maps that rank among the most accurate in the world. One mine opens into the hill miles from another and yet, when they meet, an error of a foot or more is considered loose work.

Maps and records are but one of the many means by which the officials are kept informed accurately of the nature of the work which is progressing steadily in the depths of the ground. Photography brings to them an intimate knowledge of the coal-seam, the conditions underground and saves many a tedious trip throughout the intricate windings of the workings. Most of the large companies to-day have a photographic department equipped with the best that photographic science has developed. One that comes to mind occupies the entire top story of a high building. From the spacious, well-ventilated darkroom to the second-timer clock, everything is of the best and most accurate workmanship. The man who directs this work must be familiar with a wide range of photographic methods and technical information. He must

be able to use color-corrected plates and filters with sureness; he must understand enough engineering and drafting to reproduce the big maps in any smaller scale and do it with mathematical exactitude; he is often called upon to handle many of the baffling problems falling to the lot of a commercial photographer and he must be willing to stick a miner's lamp in a cap and enter the hole in the hill, prepared either to get a creditable picture, or be discharged. Almost anything is likely to happen on these trips—and it usually does.

tunnel, everything in front comes within the lens-field. To compensate for the harsh lighting this would give, a man carrying one of the reflectors and dragging an insulated trolley-pole along the electric wire in the mine-tunnel, walked slowly in a zig-zag course down the field of vision while the shutter remained open. The light was screened from the lens and his erratic path prevented a record of his movements. This meant carrying a ponderous equipment and required a large party for the work; but they did obtain some wonderful pictures.



HEADING IN MINES

EDWARDS W. DONALDSON

A coal-mine is probably the darkest place in the world and has one advantage over the outside: the light never varies; or more exactly the entire absence of light never fluctuates. Another troublesome matter worthy of mention, is that the photographer will find himself surrounded by a substance which is a "regular glutton" for light—coal. There is but one solution; after the amount of flashpowder, deemed sufficient to light the picture, has been poured in the pan, pour in ten times that much more.

The U. S. Bureau of Mines on its photographic trip to the different regions, carried portable flood-lights with reflectors. These were set up behind the camera; for, owing to the narrow

No photographer would wilfully risk his standing with his fellows by placing his camera in the mathematical center of a railroad-track with the lens focused down the line of rails. The withering comment on such a picture, when reviewed by the PHOTO-ERA MAGAZINE critics, would make interesting reading. Neither would such a photographer set off a flash directly behind the camera. Still less eager would he be to pour two ounces of flashpowder into an open pan with a short handle and fire it while held in the hand. Yet, in a mine, there is but one place for the camera to be set up; there is only one place, seemingly, to explode the flash; and the charge must be heavy enough to carry a sufficient dis-

tance down the heading so that the perspective will not appear to run into a large, unsightly smudge of blackness occupying the entire center of the picture.

Overhead is a low roof of stone, that causes the photographer to bend over as he works. On each side are the walls of coal with about twelve feet leeway to move the camera, and extending into the distance, as far as the eye can reach, the most discouraging thing in the way of perspective that ever faced a lens. These obstacles cannot be overcome entirely, but they can be discounted to a remarkable extent by ingenious devices. The actual routine can best be described by relating a composite day in a mine with the company photographer. He is accompanied by a visitor, a pictorial worker, whose fear of mines—accentuated by newspaper-accounts of fearful calamities—has been temporarily overcome by euriosty.

Arrived at the mine, they wait near the mysterious black hole until a train of empties comes down from the tippie and starts in. The pictorial worker has been casting uneasy glances into the darkness of the hole; but, being courageous, he climbs into one of the small cars with the company man. There is a roar and they disappear into the mouth of the mine. Darkness "flashes" over them.

The pictorial worker had no idea a mine-trip traveled so fast. He wishes they wouldn't. The close fitting walls echo the roar of the flying wheels and the motor plunges and swerves with breath-taking speed. A blur of lights flashes past and that is the loaded trip waiting on a siding. Suddenly he glances up and is fear-stricken to see the low roof speeding by a scant few inches above his head. After that he ignores scenery and grovels in the bottom of the car, to the audible amusement of the motorman and the company photographer.

It ends at last. They always end, despite the fact that everything seems to point to imminent destruction. The photographers clamber out, slightly stiff and cramped. The pictorial worker immediately tries to push his head up through the stone roof to daylight. He emits some strong language and raises his hand to rub the bump.

"Look out!"

The company man makes a wild grab and jerks the hand down. "Trolley wire," he yells, "you almost ran your hand into it!"

By this time the visitor is a trembling wreck. The trip starts on and they are forced to stand huddled against the wall with the ears tearing by a bare twelve inches from their legs. Photography? Bah!

Carrying the heavy equipment, they walk with bent bodies out a cross-entry until they come to the first location. The camera is set up and focused. It is right in the car-track, of course; there is no other place for it. Focusing is done by the company man while the other "tries" the limits of the picture by holding his miner's lamp on the sides, top and bottom. By this time the visitor has forgotten his fear and is interested in the work.

"This picture is a photographic outrage," he states, "we need some relieving features, some latitude."

The company man nods his head. "We'll get it."

Everything is ready. An ounce of powder is put in the pan and the pictorial worker volunteers, much against his will, to set it off. Then a trip of cars races around the far corner and tears down upon them. The camera is grabbed, things jammed into the case, and the two make a wild dash for a manhole. Just in the nick of time. That was a narrow escape.

Again the set-up and the focusing. "All ready?"

"Open her up."

Bang!

There is a blinding sheet of flame and the explosion kicks like a shotgun. The flash, following its usual custom, goes straight up, meets the roof, and forthwith comes straight back down. It envelops the pictorial worker, singes his hair and scorches his face. More strong language.

"I forgot to tell you not to hold it so near the roof," explains the company man. "Now we'll get that latitude you were talking about. You open the lens when I yell. I'll go down to where the next cross-heading intersects and shoot a flash around the corner. That will show there are stems leading from the main branch and give the impression of broadness. It will also serve to break this stretch of track into a succession of lighted places and relieve the monotony. Also, it will serve to light up the length of this heading and prevent a big circle of blackness on the plate."

The thing was done. The visitor opened the lens as the other exploded a series of flashes along the heading, being careful to keep the flare out of the lens. While he was moving to a new position, the lens was closed or his miner's lamp would have been recorded.

They walked to the next position, bending over to clear the roof, stumbling over the ties and lumps of coal, the pictorial worker keeping a wary eye on the trolley-wire which was right beside his ear. Eager to get the experience, he asked to be allowed to focus the next one, then,



PHOTOGRAPHIC PARTY AND MINERS
LOADER AND HIS BUDDY
EDWARDS W. DONALDSON



SLATE FALLEN FROM ROOF

EDWARDS W. DONALDSON

forgetful of his miner's lamp, carried it under the focusing-cloth in his hat only to reappear a second later, spluttering and swearing and a neat hole burned in the rubber-cloth.

Suddenly his face blanched, the blood chilled in his veins and his heart was gripped in icy fingers. A dull, reverberating rumble was shaking the walls of the mine. A blast of air swept by.

"My God, the mine has caved in!" Trapped under hundreds of feet of earth. A slow, agonizing death.

Then he saw the grin on the others' faces. Glory be, all is well.

"That was a miner putting off a shot," explained the company man. "Sound travels in a mine."

There are more pictures. The pictorial worker had been under the impression that a

mine was a small place. By two o'clock he has decided it is at least as large as Boston. By three o'clock he has changed his estimate and is thinking seriously of Chicago, and by the time the company man suggests quitting, he is thinking of New York. They begin walking out.

His head is full of aching knots where he has rammed it into the roof, shooting pains have started to dart across his back, leaping from one shoulder-blade to the other; the camera-case drags his arms out at the sockets, and his knees are trembling from the unaccustomed bending. It is two miles to the outside. For about the fiftieth time that day, the pictorial worker seeks solace in strong language. The company man seeks to cheer him up by laughing at him.

Just then a trip, bound for daylight, roars into view. In the glare of the searchlight, the two weary workers wave frantic arms and swing



TRACK BURIED UNDER SLATE

EDWARDS W. DONALDSON

lamps. The motorman is scared into stopping. He argues vehemently against letting them ride. It is against the rules and dangerous, and—

In the meantime, they are piling their equipment aboard the squat motor, and as there is no room in the seat, both of them lie flat atop the iron-back of the powerful machine. The company man has again forgotten to warn the pictorial worker.

He is lying on the iron-grating directly over the rheostat and there is no chance to change position now. Heads must be kept low. The heat from the resistance comes reeking up through the iron plate and starts a slow frying-process of that part of the anatomy in immediate juxtaposition. The motor speeds up and the heat speeds up. As a relief the unfortunate pictorial worker seriously considers rolling off the thing and being ground to small bits beneath the wheels. He twists and turns to obtain a momentary cessation of the frying-process which continues with increasing effectiveness. In fact,

the situation changes rapidly from discomfort to actual suffering. There must be relief without delay or he will do something desperate.

Finally, in the distance a small, hazy square of white appears, about the size of a postage stamp. It grows larger and brighter—daylight. Good, old daylight.

The motor and trip dash out into the most dazzling sunlight ever seen. It stops and one of the men lying across the top hastily leaps to the ground. It is the half-baked pictorial worker. He blinks his eyes and staggers around for a moment, trying to get his sight. He has a dangerous glare in his eye.

"How are you feeling after your trip?" asks the company man, grinning. "You should have been along the time we went down in the dirt-bucket to make a picture of a shaft, five hundred feet down and the engineer dropped us and—"

"Keep quiet!" yells the pictorial worker. "No more coal-mines for me and I don't even want to hear of one. Understand?"



EMANGEL EPISCOPAL CHURCH
E. M. BARKER





EDITORIAL



New Uses for Photography

THE present numerous thefts of automobiles—some genuine, others spurious—have stimulated the adoption of preventives. How photography could be applied as a preventive method, probably, has not occurred to really distressed owners, and this question should appeal to the inventive bent of the photo-mechanical mind. Perhaps, the following idea—a suggestion of the Editor's—could be perfected and rendered effective. A small, grooved metal frame is attached to the inner side of the middle window, each side, of a car of the Sedan or Limousine type. In this frame is inserted a clear portrait-photograph of the driver of the car. As the car stops and the driver or owner steps out, to do an errand, he or she may be seen by a nearby policeman or some other interested person (not necessarily one with thievish designs) and, if during the absence of the driver or owner, another person with the intention of stealing it should enter, someone, noticing his likeness as compared to the one displayed in the car, might interfere, causing a difference of opinion—or something stronger. Of course, if the driver takes the precaution to raise all the windows and lock the car, the danger of theft is greatly diminished. Even so, the presence of a portrait, labeled, "The owner of this car," might act as a deterrent. There are obvious flaws in this plan. Nevertheless, it has been tried successfully.

Another, and really more valuable, application of photography is as a means to prevent accidents in factories, in preference to the resort to mechanical safety-appliances. The owner of a manufacturing-plant should inspect every place favorable to an accident, or where one has already occurred, and explain the likelihood of danger to his superintendent and in the presence of the workmen. The place is then photographed, and clear prints displayed where the workmen are employed. Thus, they can see to what dangers they and their fellows are exposed, and will take the necessary precautions. The men are also requested to report to the superintendent any source of danger that may have been overlooked, or is likely to present itself, so that it may be quickly photographed and prints displayed in the factory, near the danger-spot. It might be well for the superintendent always to have on

hand, ready for instant use, a high-grade film-camera fitted with a powerful lens, which he, himself, should know how to operate in case the official photographer—if there be such a one—should not happen to be available. Good pictures really exert a greater influence on the average mind than mere words, and the value of well-made photographs, employed in the manner here described, may be deemed worthy of consideration by thoughtful employers.



Why Finish the Amateur?

WE thought that we had put the finishing touches to the term "Amateur Finishing." It experienced a rest for a while, but we notice that it is being revived and used in the advertisements of certain photo-finishers who wish to invite the attention of snapshooters to their photo-finishing department; but why they manifest a desire to "finish" the amateur is a mystery, unless they wish to eliminate him. PHOTO-ERA does not recognise, as an amateur, the mere snapshooter who takes his exposed films to a professional photo-finisher to be developed and printed. This class of workers should be induced to devote the necessary time to develop their personally exposed plates or films and, in this way, become acquainted with the other side of practical photography, which will be found certainly more interesting than the mere snapping of the shutter. It will also prove more economical, in the end, and serve to establish the practitioners as full-fledged amateur-photographers—in itself a source of satisfaction. Camera-users, as far as practicable, are urged to do their own photo-finishing, which term, by the way, was introduced by PHOTO-ERA a number of years ago, and has been endorsed and adopted by the American and English photographic press, also by photographic writers, generally. Its meaning is clear and well understood; but if it deserves to be supplanted by another term, "Amateur Finishing" is neither appropriate nor desirable. The users of this undignified and ambiguous term should consider well its double meaning, and, no doubt, they will abandon its application.



ADVANCED COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.



Prizes

First Prize: Value \$10.00.
Second Prize: Value \$5.00.
Third Prize: Value \$2.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Prizes may be chosen by the winner, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, of artistic design, suitably engraved.



Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. **No more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Remember that subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.** Prints on rough or linen-finish surface and sepias are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. All prints should be mounted on stiff boards.

3. *Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data.*

4. Each print entered must bear the maker's name and address, the title of the picture and name and month of competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for a 2-cent stamp. **Be sure to state on the back of every print exactly for what competition it is intended.**

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, this does not prevent the photographer from disposing of other prints from such negatives after he shall have received official recognition.

6. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins; but in every case, prints should be protected by strong, stiff boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

7. Competitors who have won three first prizes within a twelve-month, become ineligible for two years thereafter. The too frequent capture of the first prize by one and the same competitor tends to discourage other participants and to make the competitions appear one-sided and monotonous.

Awards—Marines Competition Closed August 31, 1921

First Prize: F. W. G. Moebus.
Second Prize: J. Herbert Saunders.
Third Prize: William S. Davis.

Honorable Mention: George A. Beane, Jr., John C. Bird, George Bolin, Peter Botel, H. D. Clark, James H. Downey, William H. Finch, George M. Gerhard, C. W. Gibbs, E. W. Gould, Herbert J. Harper, H. E. Lovick, W. B. Miller, Rowe D. Murray, Alexander Murray, W. H. Pote, George L. Rodenburg, L. F. Rodiguez, V. Sabine, W. J. Schubert, Kenneth D. Smith, E. H. Skinner, George A. Stevens, William J. Wilson, Leopold Zwarg.

Subjects for Competition—1921

"Winter-Sports." Closes January 31.
"Home-Portraits." Closes February 28.
"Copying Works of Art." Closes March 31.
(Paintings and Statuary.)
"Home-Scenes" (Interior). Closes April 30.
"Street-Scenes." Closes May 31.
"Summer-Sports." Closes June 30.
"Summer-Flowers." Closes July 31.
"Marines." Closes August 31.
"Outdoor-Genres." Closes September 30.
"Architectural Subjects." Closes October 31.
"Domestic Pets." Closes November 30.
"Indoor-Genres." Closes December 31.



Photo-Era Prize-Cup

In deference to the wishes of prize-winners, the Publisher will give them the choice of photographic supplies to the full amount of the First Prize (\$10.00), or a solid silver cup, of artistic and original design, suitably inscribed, as shown in the accompanying illustration.

Competitors Must Mind the Rules

COMPETITORS, in the Advanced Workers' and Beginners' Competitions, are inclined to ignore some of the rules, one of which is that the name and address of sender, also name, month and kind of competition must be written plainly on the back of each print. Otherwise, how is the jury to know? Besides, the Editors are too busy with other matters to stop to write to the careless competitor for missing information.



EVENING-QUIET

F. W. G. MOEBUS

FIRST PRIZE—MARINES

The Height of the Camera

THE height of the camera in relation to the object or view to be depicted is a subject which does not usually receive the consideration which it deserves. Many photographers virtually work at a fixed elevation and adjust their subjects upon the screen, either by tilting the camera or by using the rising front, thereby neglecting a valuable aid to successful and artistic pictorial rendering.

It is granted that no particular elevation has advantage over others, the sole aim being to choose such a one as will suit the lines or proportions of the subject. In landscape, commercial work or portraiture, a high or low viewpoint must be adopted according to the exigencies of the case; and it must not be forgotten

that a difference in ground-level between the camera and subject must be allowed in reckoning the height of the camera. This may seem too obvious to need mention; but it is sometimes overlooked.

In landscape work, the importance of objects in the foreground is to a great extent determined by the degree of elevation of the camera; and it may be well to point out that the effects of using the rising, or falling, front and of raising and lowering the whole instrument are widely different and must not be confounded. The former serves merely to adjust the view on the plate, whereas the latter has a very considerable effect upon the composition of the picture. This, perhaps, can best be explained by describing a photograph of a river-scene made with the lens less than two feet from the ground, the river-bank being about six feet above



JACK'S ASHORE

J. HERBERT SAUNDERS

SECOND PRIZE—MARINES

the water level. At the eye-level of a person standing, the edge of the bank is entirely omitted, and the view commences with an unbroken stretch of water, the buildings and trees on the further bank appearing flat and uninteresting. By lowering the camera, some small bushes and plants are brought into sight, and serve to break up the monotonous surface of water, without materially altering the appearance of the distance or the amount of sky visible. If the camera-front had been lowered to include the same amount of foreground, a large proportion of the sky would have been sacrificed and a much less pleasing view of the bushes obtained. On the other hand, if an unsightly iron fence had been in the foreground, a higher point of view would have been the correct one to choose, and in certain positions might allow a foreground, invisible from the lower point, to come into view. A low viewpoint has the effect of foreshortening wide flat expanses, and this is usually beneficial to the composition.

When working on indoor subjects, either general views of interiors or single articles of furniture and the like, the height of the camera is of even greater importance, although it must be confessed that the photographer will here often find himself between two evils. A rather low position will minimise the "wide-angle effect" of table-tops and chair-seats which are near the camera; but at the same time it causes such near objects to obstruct the view of other things which it is desired to include. In such cases, the general effect must be considered and the distortion minimised by keeping such low objects as chair-seats as far from the camera as possible, and bringing a small table or cabinet into the foreground. The flat surface in this case

will be higher and the perspective less offensive. With single articles of furniture, as photographed for illustrative purposes, this trouble does not arise, and for these a lower position with the camera kept perfectly level is to be preferred to using a higher one and tilting the camera, as is commonly done, particularly when the available space necessitates the use of a shorter focus lens than is desirable. There is one contingency in which a very high standpoint is advantageous in interior work, and that is when making flashlight or even daylight views in rooms that contain a number of persons. In such cases, it is necessary to choose a position from which all the faces are visible and, in the case of a dinner, the display upon the tables. Here the camera may be placed at any height up to eight feet, or even more, from the floor and the lens pointed down, the camera-back being brought to the vertical so as to secure both parallelism of the upright lines and to bring the nearer sitters into focus with a fairly large aperture. By this means it is possible to use a much larger aperture than if the camera were level, and the saving of flashpowder or of time of exposure is considerable. When working by daylight, the risk of movement is thus greatly reduced.

In portraiture, camera-height plays a very important part, and neglect of it militates against the success of the artist. The practice of placing the sitter upon a throne or platform, so generally adopted by portrait-painters, indicates a recognition of the merits of a low position for the eye. The reason generally assigned for this is that it gives a more dignified appearance to the sitter, while it has also been claimed that a more natural effect is produced when the picture is after-



THE ONSET OF THE SURGING WAVE

WILLIAM S. DAVIS

THIRD PRIZE—MARINES

wards hung at a considerable height. The photographer will find it instructive to make duplicate exposures upon a life-sized plaster-bust, altering nothing but the height of the camera, the lens being three feet and five feet from the floor respectively, and the head being in the position usually occupied by that of a sitter. Upon comparing prints, many noteworthy differences will be found. At the three-foot elevation, the neck will appear longer and more graceful, being more or less clear of both shoulders, the nose shorter, and the mouth more turned down towards the corners, than is the case with the picture made at five feet. Lowering the camera is, of course, equivalent to raising the sitter as the painter does. Some very successful portraitists prefer to take bust pictures while the sitter stands, which, of course, comes to the same in the end; but the risk of movement, now that the head-rest is abolished, prevents many from attempting to do this.

It may be contended that, as far as the features are concerned, the same relative positions between the lens and the face of the sitter can be obtained by slightly inclining the head forward or backward. There is some truth in this; but such inclination must alter the pose of the head and neck, as well as the lighting, and the general effect will not be so good. A common mistake in photographing full-length figures, where the lens has to be raised to the height of the sitter's breast, is to give an excessive tilt of the camera, so as to include the feet and foreground; or, failing to obtain sufficient tilt, to lower the camera. The proper course is to work at the proper height, to tilt slightly, and then to center the image by lowering the lens board. It must be remembered that in any case, and more especially with a tall sitter, the lens is always in a relatively low position with a standing figure.—*The British Journal*.

Cause of Unsharp Negatives

Those photographers who use hand-cameras fitted with large-aperture anastigmat lenses should always make sure that the lens-components are screwed well home into the mount or shutter-casing after they have been taken out for cleaning. If this point is not attended to, remarks a British cotemporary, negatives may be produced that are not quite as sharp as the lens is capable of producing. An instance of the necessity for care in this direction was brought under our notice recently. The trouble was one of unsharp negatives made with a hand-camera fitted with one of the best-known unsymmetric anastigmats. The lack of sharpness was not very pronounced, and only detected after enlargements had been made, or the small negatives carefully compared with others taken previously, that were entirely satisfactory as regards sharpness. This pointed to inaccurate register, but a careful test showed that this was not the case. It was then noticed that the lens-components fitted very loosely in their mount, and it was eventually shown that after the camera had been carried for some distance the components altered their positions slightly, which accounted for the loss of definition in the resulting negatives. Another point that needs to be kept in mind, when removing and replacing lenses of this type, is that the instrument as a whole is intended to be employed with its components inserted in a certain manner, and this should be rigidly adhered to. We have an unsymmetric anastigmat in our possession that is an example of this. Changing over the back combination to the front, the instrument requires the front to be at least two inches further away from the groundglass than when the lens is assembled in the correct manner.



SUBJECT FOR NEXT COMPETITION ADVANCED WORKERS



BEDTIME

L. O. BOGART

EXAMPLE OF INTERPRETATION

Advanced Competition—Indoor-Genres Closes December 31, 1921

IN some quarters, it is said that Americans are not the home-loving people they were a generation ago. It is pointed out that there are too many attractions outside of the home-circle, and that families do not meet except to say "good morning!" Whether this be true or not, I am unable to say; but I can say with abundant proof that interest in indoor-genres or home-pictures is *not* a thing of the past. In fact, it is very

much alive, as the popularity of our competitions will attest. There is something close to every heart in the scenes that are associated with our loved ones and our homes. Even the surroundings in which we work or play have a fascination that is unequalled by other subjects. In this competition, let us place considerable emphasis upon the indoor-genre made in the home. Of course, we shall be glad to receive those that are made elsewhere and indoors; but let us try to prove pictorially that Americans are still a home-loving people and cherish those that make the true home the

"best place in all the world." After all, it is in the home that we receive our best and highest inspiration.

Genre-photography, whether indoor or outdoor, is one of the most difficult branches of photography to master. The human element involved is no small factor in the success or failure of the worker. On the other hand, there is much satisfaction in being able to solve the technical, artistic and human equations that follow one another in quick succession. During the winter, there are innumerable opportunities to produce delightful indoor-genres of home-life, family and friends. At the outset, remember that the value and charm of a genre is fidelity to fact. It *must* ring true.

In making indoor-genres, daylight, artificial light and flashlight-apparatus may be used. However, the least expensive illuminants at present are daylight, gas and electric light. A cloudy, bright day, between the hours of 10 A.M. and 3 P.M., during the months of November and December is particularly good for indoor-genre photography. There being no sun to cast heavy shadows or annoy the subject by its brilliancy, the camerist may work with comparative freedom. He will need virtually no diffusing-screens; and a sheet, placed judiciously to reflect the light where it is needed, should complete the necessary preparations. Of course, care must be taken to expose correctly and to use the plate or film best adapted to do this sort of work. This remark applies equally well to indoor-genres made by artificial light. A nitrogen-filled electric-lamp will produce a strong actinic light that will enable the worker to obtain excellent results at night. However, owing to the very intensity of the illumination, various forms of light-diffusion must be evolved in order to avoid extremely harsh contrasts and unpleasing facial expressions. Care should be taken to make sure that the electric wiring of the house and that the "service" electric current will permit such a powerful lamp to be used without danger of blowing out the fuses and otherwise injuring the wiring in the house, or possibly the operator. In most cases, the use of a nitrogen-filled electric-lamp will cause no trouble, and it is by far the most effective illuminant because there is no smoke, noise or dust. Two or more of these nitrogen-filled lamps should answer all requirements.

Then, we have several excellent types of electric home-portrait lamps which use a special type of carbon in an arc and these give out an intense though comparatively soft actinic light. There are also several excellent portrait-flashlamps on the market to-day that may be used with a minimum of danger, smoke and dust. Some remarkable improvements have been made within the last year, and the camerist who expects to do much of this work should obtain all available information from the manufacturers in order that he may obtain an equipment that will meet his needs. Obviously, these outfits are more expensive than nitrogen-filled electric-lamps; but if the camerist can afford one of these outfits, he should be able to produce excellent results. Of course, the use of gas does not enable the worker to place the illumination where it will do the most good. However, a little originality will work wonders, and even a gas reading-lamp may be made to serve the purpose. Those who demur at the use of flash-powder should remember that the modern flashlight-outfit, with its flashlight, virtually does away with the smoke- nuisance; and, at the same time, so muffles the noise of the explosion that the subject is not perturbed in the least. If the worker will use flash-powder according to directions, and with care, there is no more danger to himself or to his subject than there is in motoring, canoeing

or swimming. Of course, he who will take risks must pay the price of foolhardiness. Flashlights at night, or during the day when the light is weak, arrest motion and permit the use of low-speed lenses.

The making of indoor-genres demands an unusual degree of tact, artistic perception and a sense of humor. If the camerist attempts to succeed by assuming a dictatorial manner, or by forcing his subjects to do things that are uncongenial or unnatural to them, he will fail to make the sort of indoor-genres that the jury will approve. I cannot emphasise too strongly the necessity to make the picture conform to the characteristics of the subject. Moreover, do not desert fact to obtain effect. By that I mean, do not depict mother reading a magazine when she was never known to have the time because of the necessity to darn socks and sew on buttons; and do not show brother studying hard when he is notoriously averse to books. Even though strangers may not be aware of these discrepancies, often the subjects, themselves, will betray the deception by their stiff and "posey" attitudes. The best rule is to stick to truth, no matter how much opportunity there is to resort to pictorial dissimulation; but, in representing the models as reading, or looking at an object or a person, be sure to direct the eyes so that the effect will be convincing.

The camerist should not lose sight of the fact that there are many desirable subjects for this competition to be found in the business and professional life of readers of PHOTO-ERA MAGAZINE. Also, there are many excellent opportunities in the every-day home-life of each one of us. We all see subjects of great artistic and human appeal; but we fail to make the most of them. Subjects for this and every competition are about us without number. The fault lies with us and not with any dearth of suitable material. A well-executed indoor-genre of the local grocer behind his counter, the lawyer advising a client, the literary man at his work or even father lighting the morning-fire in the kitchen-stove, are all likely subjects if properly done. Let every camerist attune himself to the human and artistic values in the very simplest of subjects, and he will find that in this manner the masterpieces of old were produced. It seems to me that many times we seek to do the big thing, when by training, natural aptitude and equipment we are better fitted to make a success of the small thing. That is, in this competition, for example, some will not compete unless they feel that they have equaled or surpassed the interesting and excellent study on the opposite page. To my way of thinking, this is a mistake and will result in the stifling of all originality and incentive. Each worker should stand upon his own photographic feet and, regardless of the achievements of others, make his own place in photography. The jury passes upon each picture solely on account of its merit, and without any consideration of the name or reputation of the maker. We welcome the newcomer as heartily as we greet the work of old friends. Hence, let no camerist hesitate to hold his head up with the best of them and thus grow in photographic strength by honest effort and originality. Remember that true merit is bound to win.

There is an indescribable delight in making an artistic, pictorial cross-section of American family-life. The human element is the strongest appeal that an indoor-genre can feature. If this is done well, the camerist may feel proud of his work and the pleasure he will give to others. After all, is it not the good things that we share with others that bring us the greatest happiness and satisfaction?

A. H. B.



BEGINNERS' COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value, \$2.50.

Second Prize: Value, \$1.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Subject for each contest is "*Miscellaneous*"; but original themes are preferred.

Prizes, chosen by the winner, will be awarded in photographic materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

Rules

1. This competition is open only to beginners of not more than **two** years' practical camera-activity, and whose work submitted here, is **without any practical help from friend or professional expert**. A signed statement to this effect should accompany the data.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints from $2\frac{1}{4} \times 3\frac{1}{4}$ to and including $3\frac{1}{4} \times 5\frac{1}{2}$ inches, and enlargements up to and including 8×10 inches.

4. Prints representing **no more than two different subjects**, for any one competition, and printed in any medium except blue-print, may be entered. They should be simply and tastefully mounted. **Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.** Prints on rough or linen-finish surface paper and sepias are not suitable for reproduction, and should be accompanied by smooth prints that have the same gradations and detail.

5. **Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data. Criticism at request.**

6. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, he may dispose of other prints from such negatives after he shall have received official recognition.

7. **Each print entered must bear the maker's name, address, instructions, the title of the picture and the name and month of the competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type, and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for 2-cent stamp. Be sure to state on the back of every print for what contest it is intended.**

8. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins, but in every case, prints should be protected by strong, stiff boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

Awards—Beginners' Competition

Closed August 31, 1921

First Prize: Charles Clayton, Jr.

Second Prize: Channing W. Wilson.

Honorable Mention: Carl S. Davis, John J. Griffith, George F. Hogan, Neil W. Northey, R. M. Sanford.

Make Your Camera a Profitable Investment

THE beginner will do well to consider his photographic work in the light of an investment. Obviously, no investment is thought to be good that does not yield a profit. In photography, profit may be stated in terms of education, finance or both. Upon whatever terms we decide to consider photography as an investment, it is vitally important that there be a profit. Otherwise, time, money and effort are used to no advantage.

In most cases, the amateur begins his photographic career with no thought other than to make pictures of his family, friends and records of his vacation-days. However, after a time, he becomes eager to do something worthwhile—something that is big, beautiful and true. At this point in his photographic activity, he realizes that he lacks those fundamentals that are so important to the crystallization of thought or deed. If he is the ambitious beginner that he should be, he will begin to enjoy the first educational return on his photographic investment. He will feel the need to know about composition, the work of world-famous artists, the principles of optics, the fundamentals of photographic chemistry and current developments in the art and science of photography. To attain these ends, he should read the best available text-books and read them thoughtfully. Moreover, he should see to it that his reading and study are not only technical, but cultural. An acquaintance with famous paintings, contemporary pictorial art and the work of leading amateur and professional photographers will be a source of educational growth and enjoyment. The result of such a course of procedure will represent a return on the original investment that cannot be stated in terms of dollars and cents, but in terms of a broader, more beautiful conception of the finer, truer things of life. With all due credit to those who remark that fine thoughts do not fill empty stomachs, let me say that this world would not be so good a place to live in were it not for those men and women who believed in the power of their aspirations.

Although the educational and cultural return on the photographic investment is not measurable in monetary terms and possesses a value greater than money, there are those who must consider the matter financially. Often, it is the question of obtaining some pecuniary return or give up photography altogether. It speaks well for photography that comparatively few amateur or professional photographers—who have really made a success of it—care to give it up voluntarily. Hence, to make some financial profit on the photographic investment is sometimes of very great importance. In this connection, let me call attention to the series of articles on selling photographs that



BEACH OF DREAMS

CHARLES CLAYTON, JR.

FIRST PRIZE—BEGINNERS' COMPETITION

begin in this issue. The intelligent reader will find that he may apply as few or as many of the suggestions to his own case as appear to be feasible and practical. Possibly, he may require a comparatively small financial return in order to meet "the running expenses" of his photographic work. Another may find that, unless he can meet all his photographic expenses with a financial return from his *camera-work*, he will be compelled to give up his photographic activity. It is to help avoid such a loss that we are running the series of articles already mentioned. To be sure, the financial profit is in no way to be considered equal or superior to the educational and cultural profit to be derived from the photographic investment so far as the development of the individual camerist is concerned. Money does not and cannot take the place of high thoughts and purposes. However, as a well-known essayist remarked when he was reproached for doing hack-work, "but I must eat!" So it is with many amateur photographers who have high standards and ideals; they cannot obtain them without having something to eat, financially, hence they make pictures to sell in order to obtain the means to step up and out of the limitations that beset them.

This brings me to the consideration of the dual profit on the photographic investment. It is impossible and thoroughly practical to work out the problem so that whatever high standards the camerist may have, he need not feel that they will suffer contamination because there must be some financial return in order to make possible the attainment of the very standards that are so high and fine. Let us suppose, for example, that I have made a success of autochrome natural-color photography as an amateur and with no desire for financial return. Suddenly, a fall in the stock-market, poor business-conditions, the loss of a good position, or a fire or illness in the family compels me to reduce my expenditures in every possible way. To my keen regret, I feel that my work in photography must stop; for, financially, it is "all outgo." Let us suppose

that a friend, who knows the circumstances, calls my attention to the demand for good autochrome pictures among publishers of *de luxe* volumes that require pictures in color, or to some lecturer who desires certain subjects to complete his set of slides, or to a number of possibilities for the "sale" of my experience and the results of much painstaking effort in natural-color photography. Would I not grasp the opportunities thus presented to continue my photographic work? I should say I would! In no sense is this a lowering of my high standards. I am not "selling out" for the sake of money; but rather to exist photographically. If I can so solve the problem that my enjoyment of photography costs me nothing but my time, I am well content. From this it should be apparent that there is a marked difference between the practice of photography for pecuniary gain or as a self-supporting cultural and educational avocation.

It should be evident that photography may be made very profitable in a cultural sense and that financial considerations involved need not necessarily tend to stop the growth of the highest artistic and technical aspirations. Of course, to what degree the camerist is compelled to "worship" at the shrine of money, and whether money eventually becomes the predominating consideration in his photographic work, is a matter that must be determined individually. However, in this little article we have not been considering "profitable-camera-work" in the light of a bread-winning profession. The "profits" that we have been considering are those which are purely cultural or sufficiently financial to make amateur photography self-supporting. It is far better to maintain high standards through making amateur photographic work self-supporting than it is to give up camera-work altogether. A very little effort will make it possible for any beginner or amateur photographer to continue the pleasure and delight of his camera-work and thus avoid the disappointment of having to give up his cherished pastime.

A. H. B.



OUR HOME-MADE
CANOE

CHANNING W. WILSON

Print-Meters

ALTHOUGH there are a great many amateur photographers who make a practice of using an exposure-meter when making negatives, the number who use a print-meter is much smaller.

The professional printer who is using the same process day in day out can dispense with such aid; but when prints are only made now and then, the case is different. It must not be forgotten that there is no daylight printing-process in which the depth of the print can be directly observed. In carbon-printing we get virtually no image at all; in platinum-printing there is only a comparatively faint picture until the paper is developed; and in the various forms of printing-out paper the depth to which the printing has to be carried is different from the finished picture.

If we make a print by any of these methods, and then when it is toned and fixed, or developed, we find that the exposure was wrong and have to make a fresh print, we have nothing but our recollection of the first to guide us as to the exposure of the second.

Hence the value of a print-meter, which provides us with a record of the exposure given to the first print: so that we have something definite from which to work in making the next. This pays, I find, even with self-toning papers; and with the costly platinum-process it is invaluable.

Although the meter means that a piece of printing-out paper must be exposed every time a print is to be timed, it is only a very trifling expense, as the area of the piece exposed may be quite small. It is not difficult to arrange a meter which will give seven or eight

sets of exposures on a piece of paper $2\frac{1}{4} \times 3\frac{1}{2}$ size, so that a small packet of such pieces will last the average amateur for a very long while. The mistake usually made is to have the tints too much alike.

A single thickness of a suitable tissue-paper will serve for one tint, two pieces for a second, four pieces for a third, a visiting-card will make a fourth, and two such cards a fifth. There will then be a long range of opacities, so that the meter can be used for negatives of widely different character. If the tints are masked with a sheet of black paper, punched with a series of holes, it is easy to judge the depth of printing by the appearance of the faintest tint that is visible.

F. IRONMONGER, in *The Amateur Photographer*.

The Camera in Fiction

ACCORDING to a British cotemporary, all writers of fiction have not so good a grasp of photography as they might have, and many "howlers" have been recorded. Mr. E. V. Lucas, however, seems to be fully alive to modern methods, for in his "Listener's Lure" he makes one of his characters (Adelaide Fielding) write to a friend:—"I wish you would send me a photograph of yourself. . . . It is quite useless to tell me that you never go to a photographer. That excuse is dead and buried. Photographers come to us now. I am as certain that Edith (another character figuring in the story) has a camera as that I have not." And the page from which this extract is made is headed: "To everyone a camera or two." Such free advertisements of photography are welcome.



THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



A Novel Stereoscopic Effect

IN my correspondence for August, were several inquiries regarding single, still photographs having a marked, stereoscopic appearance. In this connection, a paper was read before the Society of Arts in Paris on a new process invented by Louis Lumière for producing single portraits with a stereoscopic effect. According to *The Photographic Dealer*, the process consists of making a series of six exposures representing six vertical planes passing through the object photographed. In photographing the human head, the camera is first focused on the tip of the nose and an exposure made. A second exposure is made focused on a plane passing through the eyes. The third might be slightly in front of the ears, and so on.

The lens used is specially constructed to have a very small depth of focus, and the photograph of the tip of the nose will show with extreme clearness the tip of the nose, but the remainder of the face is altogether obscure. The same is true of the other photographic, which represent clearly only that plane on which the camera is focused. Glass-positives are made from the negatives and superimposed one over the other, the distance between the plates being proportioned to the actual distances in the object photographed. These plates are placed in a box at the rear of which is a diffused light, and the photograph is seen through a glass in the front of the box. The resulting effect is almost an electrical one, the relief being far more than can be shown in any other photographic or stereoscopic method. Behind the glass is a human head, which has every appearance of solidity and depth. The observer, in order to appreciate the photograph, must place himself in the exact axis representing the line from the camera to the objective, that is, he must be so placed that the photographs will fall exactly in line one above the other. Movement to one side or to the other of this line results in confusion and the photograph is at once blurred. Also, according to the eyesight of the observer, he must stand nearer to or farther away from the photograph.

Photographing Rainbows

ONE does not see a photograph of a rainbow as often as the frequency of the phenomenon would seem to justify, and it may be taken that the cause of this is to be found in the fact that a good many rainbow-photographs are failures. This is to be expected, as the bow does not differ so very greatly in luminosity from the background of sky against which it is generally seen; and it is, therefore, difficult to bring it out with sufficient contrast.

An orthochromatic plate and a color-screen are necessary if the rendering of the different bands is to be true; but this is not at all important. All that any monochrome rendering will give is an arc with slightly differing depths of tone running along it, and variation in the color-rendering will only alter quite imperceptibly the position of the bands. At the same time, the orthochromatic plate and screen should be used if they are available, as they will help to differentiate the bow from its background of sky.

The most important matter is to keep the exposure short enough and yet not too short, so that on development the greatest possible contrast will be obtained. To do this the landscape must be ignored entirely. We could not hope to give an exposure which would show this and the rainbow correctly at the same time. The writer obtained a rainbow very clearly by using the smallest stop in a Brownie camera, giving a shutter-exposure on Kodak (orthochromatic) film. But on another occasion the same conditions failed to show more than the faintest trace of the rainbow.

As it must be, to some extent at least, a matter of luck whether the bow does or does not show, the best plan is to "hedge," as they say in sporting-circles. One's chances are increased by making several exposures of different lengths. Thus, with F/16, which might be used to cut down the light, we might give 1/10, 1/50 and 1/100 second, and select from these the negative which showed the bow most clearly.

CHAS. TALBOT, in *The Amateur Photographer*.

Photo-Stereo-Synthesis

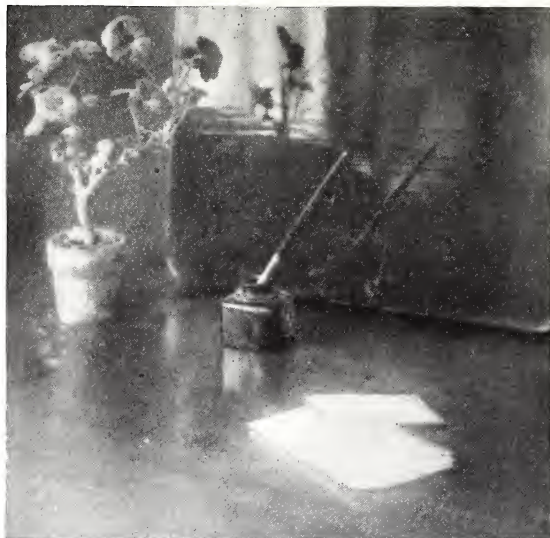
UNDER this dreadful name, remarks a British contemporary, M. Louis Lumière has worked out a process to give to photographs that feeling of solidity which has hitherto only been obtainable by means of the stereoscope. A striking example of the method—a portrait—will be shown at the forthcoming exhibition of the Royal Photographic Society. It has been made by making a succession of negatives, focusing first on the nearest part of the subject, and then moving the camera forward on guides by a succession of steps without altering the focusing. From these negatives, very thin positives are made and arranged one behind the other in proper order, separating them in accordance with the movement of the camera itself when they were made; and these positives are then viewed by means of diffused light from behind. One must stand straight in front of the combined transparencies, at a few feet distance, in order to obtain the impression of relief. It will be seen that at present the process is only of experimental interest, as the combination must consist of a number of transparencies on glass, and must be viewed in a particular manner; but we have no doubt that the example to be shown at the R. P. S. will receive a great deal of attention, were it only from the name of its distinguished inventor, to whom we owe, among a host of other things, the autochrome.

To Preserve Labels on Bottles

WE are indebted to Mr. Ralph B. Bonoit of Baltimore, Maryland, for a helpful suggestion with regard to preserving labels. Mr. Bonoit says, "I have noticed items, now and then, concerning different mixtures in making up a solution to preserve labels on bottles. Most of these mean extra work. For some time, I have coated my labels with Valspar varnish after pasting them on bottles. I let them dry thoroughly for twenty-four hours, at least, before filling the bottles with chemicals. Some of my bottles, labelled as described, have been in use over a year and they are still in the first-class condition of a year ago."



OUR CONTRIBUTING CRITICS



YOUR CRITICISM IS INVITED

Whoever sends the best criticism (not over 150 words) before the last day of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

The pastoral scene, in September, seems to have been offered purposely to draw the fire of O. C. C. Which the camerist considers the main point of interest is hard to tell, whether the mass of foliage overhead (giving the picture a top-heavy appearance), the two tree-trunks, the group of sheep or the fence-post in the foreground. In effect of light and shade, the picture is "confusion worse confounded." The light seems to come from the left and, in the absence of title and data—which is regrettable—it may be in the early morning or the late afternoon, as the shadows are long. The only way I can see to improve the picture is by "etching," on the negative, and that requires skill and experience. Obliterate the first (darker) tree-trunk, replacing it by harmonizing material—foliage, if you like. With reducer eliminate the spots of sunlight on

the other tree-trunk. Remove the post in the foreground, subdue the others, but maintain the ratio of tone. Slightly darken the path of the sun in the foreground and the lighted lower left corner, also the sky at the left of the remaining tree-trunk. By doing these things successfully, Mr. Workman will, *I think*, greatly improve his pastoral.

ROBERT M. DODGE.

This print is one of the many that can be considered from two different angles. 1st, we can look *at* it, and criticise; or we can look *into* it, and criticise. We see things differently in each case. As we look *at* it we are conscious of its effect *in toto*; we see a heavy, dark mass of foliage pressing down from the top and a few splashes of sunlight. At first glance, the sheep are hardly noticeable. From this point of view we must criticise composition, balance, exposure, etc. The motive does not matter. Perhaps from the standpoint of artistic photography this is the *only* way to consider a photo-record. But suppose we look *into* the print. We find ourselves under a nice, shady tree, enjoying,



THE PICTURE CRITICISED THIS MONTH

along with a small flock of sheep, a cool retreat on a very hot day. We can see and feel the pastoral beauty which induced the photographer to make the exposure; we forgive him for any error he may have made from an artistic or technical standpoint. We do not care; we are content to remain in the shade of the tree. We may nap, perchance. Come to think of it, I believe that Mr. Workman has told a story very plainly. But we must look *into* the picture, not *at* it, to understand.

GEORGE A. BEANE, JR.

THE subject that could be made so full of restful and ideal repose, is spoiled by two big, black tree-trunks and some huddled-together, blurred sheep as a foreground. There is nothing to offset them—they emphasise only one thing—themselves. The perspective, with a wire-fence cutting its middle, lacks balance, strength and beauty. The play of light and shade is unnatural. I should say inaccurate shutter-speed and dust in valve or on glass, was to blame for spots on tree-trunks. The picture is hazy, and the angle from which it was made is wrong.

FRANK LA BAU HILLER.

IN my judgment, the picture in August is a conspicuous example of a print without any central or chief point of interest. All the elements vie with one another. The attention is, therefore, distracted from this point to that; and these features preclude all semblance of balance. The trees, specially the over-dark

parts, offend, and the stiffly and starkly recurring fence-posts never could appear to advantage, in any picture. The sheep are poorly grouped, and appear to be seriously thinking about pushing their way through the wire-fence. At the lower left corner, the mass at base of trees cannot be identified, and if for only this reason, is an intrusion in the picture. Owing to these many faults, I think this particular view should not have been given a thought, as far as expending time on the exposure is concerned. Surely, the maker has better photographs to show us.

LYNDESEY BOURKE.

THE author of this picture has certainly chosen a pleasing subject, for sheep in the pasture always suggest a restful quietude as well as beauty. However, the sheep in this picture are not distinct enough from the surrounding objects to attract the eye readily. The tones of the sheep and immediate object are too even; but this fault might be overcome by printing on a harder paper. The fence also makes it difficult to look at the sheep, as its straight line draws the eyes away. It would have been better to have the fence farther away, or at right angle with the camera. A more subdued background should have been selected, as the lighting in the field is pretty harsh. Possibly, a little skilful reduction might help now. With this reduction and trimming about two inches from the top, I think a more even effect could be obtained.

WARWICK B. MILLER.

(Continued on page 263)



OUR ILLUSTRATIONS

WILFRED A. FRENCH



SYMBOLICALLY, gastronomically, is the king of all birds—in season—the turkey. But he is only the material expression of our joy that supersedes a nobler thought, a higher sentiment—thanksgiving for an abundant harvest, not only of the fruits of summer and autumn, but of other benefits that emanate from the divine Creator, the giver of all things. Let none of us be unmindful of the blessings that have been bestowed upon us, in a manner befitting our deserts—yes, even prodigally, unstintingly, without discrimination, free of injustice. And when our hearts turn earthward, towards those whom we would bless for gifts of love and friendship, let us surely remember our good and patriotic President, at Washington, who is earnestly striving—not by a display of empty rhetoric, or words of arrogance and hypocrisy, but by acts of true and becoming Americanism, to make this again a country of Washington and of Lincoln.

This bird, then, reared, fed and guarded for our epicurean pleasure, well deserves the compliment of fitting portrayal by an artist of the camera—in this instance, John Smith. With the pride and display of a peacock, he struts along, quite unconscious of the fate that awaits him—at the hands of the executioner. Thus, he monopolises the November cover, and page 237, having yielded successfully to the artist's skill in circumstances as follows: 10 A.M.; dull light; 4x5 Graflex; 6½-inch B. & L. lens; stop, F/4.5; 1/25 second; Eastman Portrait Film; pyro. in tray.

The charming frontispiece owes its origin to the interpretative skill of Signor Menocchio, of Turin, Italy. It was awarded Honorable Mention in our "Home-Scenes" competition. It pictures a scene of domestic felicity and sincere, unaffected sisterly interest. The treatment of this ordinarily difficult theme is marked by true artistic feeling and technical skill. The action appears spontaneous, yielding a graceful, well-balanced group. The absence of data is to be regretted.

The twin-pair of cupids, photograph by W. H. Brown, page 221, displays sufficient beauty and charm to merit a place on the canvas of an Italian Madonna. The youngsters were grouped and pictured in a professional studio, which speaks well for the artist's resourcefulness.

Data: December; north light; 12.30 P.M.; 8x10 studio-camera; 3A Suter portrait-lens; at full aperture; 1/4 second; plate, Seed 30; pyro; Artura print.

The pictorial illustrations that accompany Dr. Daltzell's illuminating story, pages 222 to 228, evince adequate control of photographic resources and their skillful application to the subjects to be pictured. The data, which will be appreciated by those who contemplate a visit to the interesting island of Tahiti, a French possession, are as follows:

On the Quay, Papeete. June 25, 1920; 8.45 A.M.; Premo Film-Pack; 9-in. Telecentric; F/8; 1/16 second; K1½ Screen.

Papeete. June 28, 1920; 12.45 P.M.; Premo Film-Pack; Ross Xpres; F/11; 1/32 second; K1 Screen.

On the Shore, Tahiti. July 1, 1920; 11.15 A.M.; Wellington Anti-Screen; Ross Xpres; 1/32 second; K1½ Screen.

Rue de Rivoli, Papeete. June 30, 1920; 1 P.M.; Premo Film-Pack; 9-inch Telecentric; F/6.8; 1/16 second.

Quai de l'Uranic, Papeete. June 30, 1920; 3.30 P.M.; Premo Film-Pack; Ross Xpres; F/8; 1/4 second; K1 Screen.

A South-Sea Islander. July 6, 1920; noon; Premo Film-Pack; Ross Xpres; F/11; 1/32 second; K1 Screen.

"Where the long-backed breakers croon, Their endless ocean-legends to the lazy, locked lagoon."—(Kipling.) (Exhibited at Scottish National Salon 1921.) July 1, 1920; 9.45 A.M.; Wellington Anti-Screen; Ross Xpres; F/11; 1 second; K1½ Screen; Hypo-Alum toned enlargement on rough cream bromide.

In the Fringe of the Lagoon. July 1, 1920; 3.40 P.M.; Wellington Anti-Screen; Ross Xpres; F/11; 1/4 second; K1 Screen.

Diadème River, Tahiti. July 2, 1920; 3.30 P.M.; Premo Film-Pack; Ross Xpres; F/16; 1/2 second; K1½ Screen.

With rare good-nature supported by an international reputation as a first-rank photo-pictorialist, Mr. Zerbe permitted us to use his truly first photograph. Page 239. Disregarding the shortcomings that attended Mr. Zerbe's initial photographic effort, there is a feature that merits high commendation, and that is the almost perfect symmetry of the composition—a symmetrical arrangement that would do credit to a painter of the Pre-Raphaelite school. Our friend had a sense of proportion, and of humor, even in the early days of his photographic career. It was not many years, however, before he began to make real pictures—pictures that stood the test of severe criticism. Naturally, as his taste grew and his artistic judgment ripened, he improved in his pictorial work, so that in 1905 he entered prints in PHOTO-ERA competitions that were awarded prizes. His successful sheep-picture, entered in 1903, reproduced in January, 1909, and, again in the current issue, page 240, is a representative example of his artistic ability and poetic instinct.

Data: July, 6 P.M.; fair light; 8½-inch Goerz lens; stop, F/6.8; 1/50 second; Cramer Iso; pyro-acetone; carbon print from enlarged negative.

Interesting and instructive though they are, the photographs made in a coal-mine, by Edw. W. Donaldson, pages 242 to 247, are not of a character to lend themselves to artistic rendering. A Hall Caine, with his magic pen, can picture scenes, episodes and dramas in regions away down in the earth, in a manner that no camerist can hope to rival. All the same, Mr. Donaldson has succeeded in imparting a realism to his pictures that may create a desire among camerists to risk a photographic visit to the "infernal regions."

Data: Typical mining town. Page 242. The large mound in the foreground is slate taken from the mines. Heading in mines. Page 243. Three flashes—1/2 ounce each in foreground; 1 ounce behind camera. Photographic party and miners resting, in mined-out area. Page 245. Two flashes simultaneously; side—1/2 ounce; front—1/4 ounce; lens used at F/16. Loader and his "Buddy," mining pillar coal. Page 245. Beyond the block on which they are working, the coal has all been taken out; the hill has fallen in. 1/4 ounce of powder; at stop. F/11; impossible to dodge post at right. Mass of slate fallen from roof. Page 246. Two flashes; 1 ounce behind rock in foreground, and

$\frac{1}{2}$ ounce behind camera. Track buried under slate. Page 247. Track-men preparing to clean it up. Roof, which was normally four feet high, has fallen to a height of twenty feet. One ounce of powder; F/16.

As a maker of attractive and technically perfect pictures, E. M. Barker enjoys a high reputation. His "Emanuel Episcopal Church," Baltimore, Md., page 248, is a photograph difficult to criticize. This is the picture meant by Mr. Barker—page 180, October issue, and *not* "Hampton Roads." Those data, same as below, apply to picture, page 248.

Data: October, 12.45; bright light; 4 D (4x5) Eastman Kodak; $\frac{5}{8}$ -inch Dallmeyer; stop, 128; 3-time color-seen; 9 seconds; Hammer Red Label; pyro; enlarged on P.M.C. Bromide.

Advanced Workers' Competition

THERE is an expanse, a distance and a vastness in Mr. Moebius' well-spaced and well-proportioned marine, page 251, that make a deep impression on the beholder. The atmospheric perspective throughout this finely constructed picture merits high praise. It does one good, too, to know that multi-masted ships are still with us, and that for propulsion they rely on natural, rather than artificial means, with which latter are associated thoughts of strikes, contention, greed, and the like. It is a pleasant change from the huge steel-ships to wooden craft that "sail the ocean blue."

Data: June, 5 p.m.; good light; $3\frac{1}{4}$ x $4\frac{1}{4}$ Goerz camera; $3\frac{1}{2}$ -inch Goerz; stop, F/16; 1/50 second; film; pyro; print on Wellington paper.

"Jack's Ashore," by our overseas faithful contributor, J. Herbert Saunders, page 252, is an attractive and unconventional theme—something that makes an appeal to the imagination. We hope, however, that Jack is behaving himself, while on shore, and that he is a credit to his navy. Whether Jack's boat belongs to one of the destroyers anchored in the stream, in the background, would be hard to tell. A nautical expert, or one familiar with the locality pictured by our artist, may be able to determine whether Jack arrived at high tide, and during his absence the tide went out; for, it is not likely that, if he belonged to the flotilla, he would drag his boat across the flats. In any event, it may be a question of artistic license, which, from a photographic viewpoint, I do not approve.

Data: June, afternoon; diffused light; $3\frac{1}{4}$ x $4\frac{1}{4}$ Reflex camera; $5\frac{3}{4}$ -inch Anastigmat; stop, F/8; 1/25 second; Wellington Anti-searc; Metol; enlarged on Eastman Cream P.M.C. Bromide.

Mr. Davis' wave dashing against the rocks, page 253, is a theme which the artist has interpreted a number of times, but always with masterly skill. Superbly executed though it is, the "Surging Wave" had to give way to a less familiar theme.

Data: Autumn; 10.15 a.m.; light sun; $2\frac{1}{4}$ x $3\frac{1}{4}$ Conley, Jr. Camera; $4\frac{1}{4}$ -inch R.R. lens; stop, F/22; 1/50 second; Anso Speedex Film; pyro; print on Velours Black Rough.

Beginners' Competition

OUR regular readers will recall that, in pictorial subject and treatment, the first-prize pictures in the Beginners' Competition occasionally rival a correspondingly successful one in the Advanced Competition. This is true of Charles Clayton's "Beach of Dreams," page 257. The subject has been well chosen and fits the title admirably. The conception and handling of this delightful theme speak well for the maker's genuine artistic feeling, refined sentiment and sense of beauty. The uniformly mellow tone and atmospheric quality add greatly to this highly meritorious achieve-

ment. It would be easy to suggest that the sky be a little higher—to be in better proportion to the lower section (beach and sea) or that the clouds be made to appear less conspicuous so as not to detract from the beauty of the beach; but—were I not sure of the genuineness of the original photograph, I could be easily persuaded to accept it as a photographic copy of a painting.

Data: July, 2.30 p.m.; bright sun; heavy clouds; 3A Kodak; used on tripod; 1/160 second; film; Eastman Tank Dev. Powders; print, Azo No. 2 Hard.

"Our Home-made Canoe," page 258, reveals another picture-maker of sterling merit. Though the offering cannot boast impressive dimensions, it holds the beholder's attention by reason of its natural beauty and human interest. The effect of producing a picture divided into two equal parts has been happily avoided by the inclusion of the canoe with its two conspicuous occupants, and having it placed in the right spot. The blank sky is not a very serious offense; but it is very easy to improve it by toning it gradually in the printing, to facilitate which a slow printing-medium and subdued light are necessary.

Data: June, 10 a.m.; strong light; 2C Folding Brownie; $5\frac{1}{2}$ -inch R.R. lens; stop, U.S. 8; 1/25 second; Eastman Speed Film; Elon-hydro, in tank; Velox contact-print.

Example of Interpretation

THE subject that will call forth the creative ability of interested participants until the last week of December next, indoor-genres, has always been found to be welcome. It was delightfully interpreted by L. O. Bogart, seven years ago, and, despite its shortcomings in arrangement, his print was honored by the PHOTO-ERA jury. It is presented on page 254, and should serve as a practical suggestion to our interested friends, who can take advantage of similar and other opportunities as soon as agreeable, now that indoor-activities will be the order of the day—or evening.

Data: 5x7 Premo Camera; B. & L. R.R. lens; stop, U.S. 8; flashlight; No. 3 Eastman Powder, divided so that $\frac{3}{4}$ was used as a front light, and $\frac{1}{4}$ as a rear (supplementary) light. Stanley plate; pyro, in tray; print, 5x7 Azo Hard. A critical analysis of this engraving picture will be found on page 314, June, 1914.

Our Contributing Critics

THE picture that is to test the critical acumen and constructive helpfulness of our Junior Editors was an entry in the Still-Life competition, held several years ago. The author, an enthusiastic worker, was a resident of Canada till the beginning of the present year. As she could not be reached, the necessary data are lacking. The title, "Reflections," page 260, seems to explain the motive of this very interesting study.

O. C. C. Criticisms (continued)

As one of your contributing critics, I tender the following on the pastoral bit that you have selected to be criticised, this month. In my opinion, the artist has picked a difficult angle to handle this subject. The fence, sheep and trees give both a crowded and unbalanced effect. There is also a conflicting interest between the sheep and the lighter, middle distance. This middle distance also slants downward out of the picture and is accentuated by the sky-line of the distant orchard and the drooping branches of the near tree. Half an inch cut off the top of the picture would eliminate the jarring angle caused by the dark limb extending from the tree in the foreground.

ALISON WHEELER.



ON THE GROUNDGLASS

WILFRED A. FRENCH



Photographic Courage

As the average camerist knows, there are two kinds of courage, physical and moral. Of the former kind many daring feats are on record—the motion-picture photographer, particularly, leading in this respect. Moral courage may be sub-divided into several classes, one of which I do not approve, and which I have condemned on several occasions. It is making exposures of subjects which would seem to require special permission, but which are usually made without it. The kind of moral courage that merits my admiration is associated with a series of stories now running in PHOTO-ERA MAGAZINE under the heading of "My First Photograph."

In requesting the many photo-pictorialists for an account of their first experience and sensation in connection with the making of their very first photograph, I stipulated that a print of their initial experiment was to be supplied at the same time, and to be published with the story. It did not matter whether the first photograph was successful or embarrassingly otherwise; but, whatever it was, it should accompany the narrative of the very first photographic exposure. Naturally, some of the photographers demurred, on the ground that they should not care to have any one outside the family behold the unsuccessful character of their first attempt in practical photography. And who can blame them? When, however, these accommodating photographers understood that one of their later successes, published in PHOTO-ERA in the past, would accompany their story and show a pleasing contrast between an unsuccessful attempt and a satisfactory and artistic one, they changed their reluctance to willingness, and furnished a print of their initial photograph. Nevertheless, it required no small degree of courage to permit the world to see a picture which the maker would prefer to conceal from public gaze. Nor were the ladies less courageous than the men—in fact, they were not a bit squeamish with regard to telling the story of their very first photographic attempt which occurred twenty-five or more years ago! As one of them wrote me: "No; I am not at all ashamed of my age when you consider that those whom I photographed many years ago are grown up and have families of their own!" If this is not an exemplification of courage, then some one please enlighten me.

The Three Elevators

It was pure chance that the only photo-pictorial displays by amateur workers, at the recent photographers' convention at Springfield, were by three prominent members of the Portland (Maine) Camera Club, viz., Lovejoy, Libby and Latimer—the three L's, as it were.

Now, Latimer, always ready with some amusing anecdote, will want to take liberties with this singular circumstance by referring to a certain abode of elevated temperature! As for myself—profiting by the coincidence of the three L's—I prefer to think that the three pictorialists have helped to *elevate* the artistic standard of the Portland Camera Club.

A Freak-Overexposure

It is well known that an extreme overexposure causes a direct positive instead of a negative, when developed. The following incident, corroborated by a correspondent in an English cotemporary, is an example of this reversal of the latent image. It seems that an English photo-dealer put a roll into a Vest-Pocket Kodak, fitted with an F/8 lens, and turned the film to number 1, with the intention of making some snapshots. Something came up which made him forget all about his camera, which he had put aside. Needing a camera to add to the window-display, his assistant took this particular camera, accidentally opening the shutter, and placed it in the window directly facing in the direction of the house opposite. The camera, with shutter open, thus remained for about six weeks, no one being aware of the facts in the case. Wishing to use the camera after the six weeks' display in the show-window, the proprietor took it out and, seeing the exposure number 1 wound up, turned the film to number 2, went out and exposed the remaining part of the film. In unrolling the exposed film, the photo-finisher discovered—even before placing it in the developing-solution—that a clear picture of the house opposite the photo-dealers' store was clearly printed on the film, but in the form of a negative. Even after it was developed with the rest of the film, this strangely created negative underwent no change, when the photo-finisher reasonably expected that it would change into a perfectly opaque and dead black! Although this incident occurred during the hot season, it is not to be classed with the usual sea-serpent story or fishing-experience. It is true in every detail, and confirmed by trustworthy persons.



The Trials of a Model

A WELL-KNOWN Washington photographer, on a camera-tour in North Carolina, last spring, was looking about for a pleasing subject, when he discovered an old negress in the immediate vicinity gathering wood. Seeing the possibility of some artistic studies, he beckoned to her and asked that she be seated on a little mound in the foreground, and pretending to be engaged in mending a rip in her dress, and thus form the subject of an interesting picture.

The old woman consented, and, after the camerist had exposed a plate on her, she inquired: "Massa, how long have I done got to sit here?"

"Oh, just about fifteen minutes," replied the camerist.

After a short interval, the old negress began to manifest considerable uneasiness, and asked the photographer if the sitting were over. Noticing her anxiety, he replied:

"Just about three minutes more; but why so anxious?"

"Well," replied she, "I've got lots o' time; but I've done sittin' on an ant-hill, sir!"

Adapted from *The Craftsman*.



ANSWERS TO QUERIES



A. B. P.—To prepare a combined developer-fixer for ferrotype-plates the following formula may be of service:

Water, to make	40 ozs. fluid
Hydroquinone	$\frac{1}{2}$ oz.
Sodium Sulphite	$\frac{1}{4}$ ozs.
Sodium Carbonate	$\frac{1}{4}$ ozs.
Hyposulphite	8 ozs.
Liquid Ammonia, .880	2 fluid ozs.

The use of more ammonia gives greater contrast. The plates are developed and partly fixed in two or three minutes, after which they may be examined in daylight and fixed in plain hypo.

C. H. W.—Long bellows are required to copy objects natural size or nearly so. Often very satisfactory copies are made by using so-called portrait-attachments and copying-lenses in connection with the lens supplied with the camera. Technically, the best results are obtained by using a plate-camera equipped with a double- or triple-extension bellows and ground-glass for focusing.

P. C. O.—On a fishing-trip, films are preferable to the use of plates unless accurate scientific photography is to be attempted. The almost exclusive use of films throughout the World War is proof enough that satisfactory results are obtained. In your case, weight is an important item; and likewise the danger of breakage must be considered. A small vest-pocket roll-film camera equipped with an anastigmat lens should meet your requirements efficiently. The best negatives may be enlarged to 5 x 7 or even 8 x 10.

F. L. A.—Liver of sulphur used in sepia-toning, according to Merck's Index, is the so-called "Potassa Sulphide"; *Hepar Sulfuris*; Fries: potass-carbonate with sublimed sulphur, by fusion. Mixture containing potassium trisulphide and potass. thio-sulphate. Yellowish-brown lumps; faint hydrogen-sulphide odor; alkaline, bitter taste.

G. M.—Prints on semi-mat paper are preferred to glossy ones. The outstanding features of a prize-winning print are originality of theme or subject, and artistic interpretation and technical excellence—which latter does not mean microscopic definition! If you will please get a copy of *PHOTO-ERA MAGAZINE*, and look it over carefully, you will see what is required.

J. V. II.—The change from a rectilinear lens to an anastigmat requires close attention. You say that your new roll-film camera, fitted with B. & L. Zeiss Tessar II B F 6.3 lens is causing you more trouble than your old box camera ever did, and that you cannot obtain sharp pictures. Since your new equipment has no groundglass, it is of great importance that you estimate distances correctly. If you have a good idea of distance, and the trouble still continues, it may be due to the fact that the focusing-scale is not properly adjusted. An anastigmat lens must be focused very carefully, as a slight movement forward or backward renders the picture sharp or out of focus. We would suggest that you use stop F/8 and a shutter-speed of about 1/50 of a second, and make several pictures without altering the stop or speed. With the lens and shutter set as indicated, you should obtain clear sharp pictures from about twenty feet in front of

the camera to infinity. Should this test not prove satisfactory, we would suggest that you take the camera to a competent camera repair-man and have him check up the focusing-scale.

B. H. W.—An F/4.5 lens stopped down to F/6.3 is identical in speed to another lens that works at F/6.3. The speed in this case is not a matter of the construction of the lens, but the size of the stop.

L. J. E.—Long-focus lenses generally improve the perspective; at the same time, they narrow the angle of the picture to such an extent that the field of view is reduced. The entire matter depends upon the work in hand. For pictorial photography, it is better to have a lens of fairly long focus than one that is too short.

W. B. C.—If there is depth of focus in a small negative, it will appear in the enlargement; if in the small negative there is no depth of focus, no amount of enlarging will put it there. It must be remembered that enlarging cannot put into a picture that which is not in the negative. With this in mind it is advisable to obtain depth of focus at the time the picture is made.

P. T. II.—The brilliancy of blue-prints may be improved by the following method, though the shadows have always a tendency to block up. Expose a trifle longer than usual, and before putting in water, immerse and leave for about five minutes in a bath of strong ammonia one part to one hundred parts of water. Wash thoroughly—then develop the weak gray print in a solution of citric acid five parts to one hundred parts water. The prints change from gray to green, then to blue. Wash well.

C. P.—Brush development of gaslight prints is not difficult. The print to be developed is first thoroughly wet in water, then placed on a sheet of glass supported at an angle in a developing-tray and the surface water blotted off. The usual developer is diluted with about one-fourth its bulk of glycerine and applied with a rather wide rubber-set brush. It is possible to produce very pretty sketchy effects by this method. A smaller brush dipped in stronger developer may be used to bring out detail, or dipped in glycerine to hold back certain parts.

V. B. E.—It is possible to stain negatives for the improvement of printing quality. If a plate is flat and lacking in detail it may be strengthened by immersion in a solution of gray-blue aniline. The color is absorbed in proportion to the amount of silver reduced, and the printing detail is greatly improved.

J. II. R.—Sodium sulphantimoniate is the chemical designation of Schlippe's salt. It is composed of rather large yellow-reddish tetrahedral crystals that are soluble in water. It is used as a redeveloping-agent for sulphide-toning and for intensifying negatives after mercurial bleaching. It is regularly listed in *Merck's* chemical catalog.

T. W. II.—Cloud-effects may be obtained without the use of a ray-filter; but a good filter is to be advised. Modern orthochromatic plates and films help wonderfully to reproduce cloud-effects without a filter and often it is possible, early or late in the day, to make beautiful cloud-pictures without a ray-filter.



EVENTS OF THE MONTH

Announcements and Reports of Club and Association Meetings, Exhibitions
and Conventions are solicited for publication



Britain Imposes Duty on Imported Photo-Goods

THE House of Commons has at last come to the aid of the British photo-manufacturers. Beginning with October 1, this year, certain photographic goods imported into England from countries overseas (not part of the British Empire) will be subject to an import-duty equal to one-third of the value of the goods. In Class A (optical glass and optical elements) unmounted photographic and projection lenses, unmounted condensing-lenses and optical light-filters are included. Class B (optical instruments) includes photographic cameras, with or without lenses, view-finders, optical lanterns, stereoscopes, cinematographic and photomicrographic apparatus, also mounted photo-lenses and condensers. Among the chemical substances, subject to 33 1/3 per cent duty, are such commonly used developers as amidol, glycine, hydroquinone, metol, paranitrophenol and pyrogallie acid.

This long-delayed and for some time necessary import-duty will apply to goods imported from the United States equally to those from countries such as France and Germany whose currency is greatly depreciated. The value of any imported goods for the purposes of the Act is taken at the price which an importer would give for the goods if the goods were delivered to him freight and insurance paid at the port of importation, and duty is to be paid on that value as fixed by the Commissioners.

It will be interesting to note to what extent, if any, there will be a decrease in Britain's consumption of German-made photographic products which are affected by this new tariff. At any rate, this protective tariff, rather than a governmental source of revenue, should have the effect to increase the sales-price of these imported goods, but to what degree—as applied to goods coming from Germany, which is a country of resourcefulness, as well as of low manufacturing-costs—remains to be seen.

An Interesting Comment

IN the August issue of PHOTO-ERA MAGAZINE we ventured a suggestion to our cotemporary *The Photographic Dealer* of London, England with regard to the influx in England of German cameras and lenses. Below is the comment of our esteemed cotemporary.

"Our American cotemporary, PHOTO-ERA MAGAZINE, ventures to tender us a little advice on the subject of German cameras and photographic supplies. After quoting our comments on the subject in a previous issue, in which we stated that the level-headed dealer will know perfectly well that his future depends upon the prosperity of the British industry, and that he will, therefore, see to it that the British manufacturer has his fullest support, our cotemporary says 'might it not be well for the patriotic *Photographic Dealer* to encourage the adoption of a protective tariff, rather than to appeal to dealers and consumers to abstain from buying cameras, lenses and chemicals of German manufacture.' Very subtle advice, indeed, but unfortunately we have not failed to observe that

our American allies in the Great War have long since availed themselves of the opportunity of reopening trade relations with Germany. American photographic journals are spattered all over with announcements of German goods, and, as these are paid for, we assume the guiding principle has not been unconnected with money-making.

"We are content that PHOTO-ERA MAGAZINE should continue to profit by the advertisements of German products, so long as our readers see the wisdom of the advice which has so frequently been tendered in these notes. The action of the Photographic Dealers Association is to be highly commended. The British manufacturers have shown their willingness to co-operate with the dealers in every way; they have and are spending vast sums of money in propaganda with a view to increasing the number of photographers, and so long as they have the goodwill and full support of the dealers, this happy condition of affairs will continue. No British photographic dealer need envy his American *confrère*, for in no country in the world does a better relationship exist between manufacturer and dealer than in Great Britain."

A Correction

THE closing line of our editorial reference to the pictorial activity of Nancy Ford Cones, in the September issue, appears to be a misstatement. Mrs. Cones informs us that, besides attending to her professional home-portraiture, she gives whatever time she can spare to pictorial work. Among other pictorial activities, she and her husband are preparing a collection of about fifty gum-prints which is to be exhibited at the Cincinnati Museum of Art, in November. An artist of Mrs. Cones' ability surely never could abandon pictorial photography, unless incapacitated; and, fortunately, Mrs. Cones is in good health and an enthusiastic worker.

Studio-Portraits at Springfield

TO interested readers of our account of the Springfield Convention, we would say that the portraits made in Mahogany Hall, by the eminent studio-photographers, Garo, Buxbaum, and Erickson, were not free, as generally supposed. The modest sum of \$5.00 was charged for each sitting, which included from one to three positions. Eastman 8x10 Portrait Films and plates were used by the three artists. The illumination was daylight—which came from tall windows which were properly screened—Haldorsen's Portrait Flashlamp, and the Prosch Mazda 3c. 400 watt hand-lamp (specially made after Mr. Buxbaum's design).

Camera Correspondents Encouraged

EVIDENTLY, journalism of the future holds extended possibilities for the newspaperman who can use a camera. In the list of questions put to representatives by the management of a picture-paper, that is now engaged in revising its list of correspondents, occurs the inquiry: "Can you make photographs or arrange for them to be made?"—*Newspaper World*.

Exposure-Meters and the "Dull" Season

WHY is it that some photographic dealers "throw up their hands," figuratively speaking, as soon as the short, dull days of autumn and early winter arrive? For some unexplained reason they appear to assume that "the season is over" and that there is nothing to do but hibernate for the winter. This state of mind is one factor in slowing up photographic activities and the sale of cameras during the fall and winter.

No one will deny that the American market offers several excellent exposure-meters, any one of which will enable the intelligent beginner or amateur photographer to make good pictures all winter long. Why would it not be a good plan for some dealers who complain of slack business to stimulate the sale of exposure-meters to the end that their customers would not cease their camera-work and thus cause a "slump" in the sales and photo-finishing departments? A little extra effort to convince the amateur that with a good exposure-meter he can make satisfactory pictures all winter long, will bear fruit in a very short time to the mutual delight of the camerist and dealer.

Photography has no seasons. It is an all-the-year-round pastime or profession. Some dealers are to blame for the very conditions that seem to be so hard to meet at present. Unintentionally, to be sure, they have let the idea gain momentum that the fall and winter are "poor" seasons, that the camerist cannot be expected to make good pictures in the dull light, that the cold weather will "freeze up" the camera-mechanism, etc. No wonder the beginner or the amateur becomes discouraged and does not even try to make pictures. How different this might be if each dealer would resort to the same "live" sales-talk that he uses during the spring and summer months; and, in addition, show convincingly the practical value of a good exposure-meter at this season of the year. It can be done and is being done by wide-awake dealers who see in such a campaign an excellent opportunity to maintain interest in photography and thus turn hitherto "dull" seasons into profit for the camerist and photo-finisher alike. Let it be remembered that modern cameras, used intelligently with the aid of a good exposure-meter, will make satisfactory pictures in dull light and that some of the best photographs ever made owe their beauty and appeal to the absence of strong actinic light. To say the least, is not a campaign for the all-year-round photography worth trying out?

A. H. B.

Southern California Camera Club

At the last annual election, in September, of the Southern California Camera Club, Los Angeles, the following officers were elected: president, Ralph G. Hawkins; vice-president, Claude Williams; secretary, Miss Frances Purdy; treasurer, E. R. Tabor; board of governors, R. M. Weed, Orrie P. Close, W. L. Jennings.

The following committees were appointed: program-committee, R. M. Weed, Miss O. P. Close, F. E. Mayben; print-committee, R. P. Mansfield; outing-committee, Mr. Mackey, Mrs. Mackey, Miss Ethel McDowell, Mr. Hastings, Miss Beatrice Cope; lantern-slide committee, W. C. Sawyer; house-committee, E. R. Tabor, Claude Williams, William Felix; library-committee, W. C. Sawyer; publicity-committee, R. L. van Oosting, Jr.

R. L. VAN OOSTING, JR.

Dr. Lovejoy's One-Man Show

DR. RUPERT S. LOVEJOY, a member of the Portland Camera Club of Maine, whose exhibit was a prominent art-feature at the Photographers' Convention, Springfield, Mass., last September, will have a one-man show at the Camera Club, New York City, beginning November 1, 1921. Dr. Lovejoy is a quiet, but highly successful, worker in the field of pictorial photography, and his exhibit should, and doubtless will, attract much favorable attention.

Pivotal Points in Photography

THERE is a story told of a man who became lost in a thick forest. When he was finally rescued, he was asked how he came to wander into such a trackless forest. He replied that he could not see the forest on account of the trees! So it is, sometimes, in photography. The amateur or professional cannot see the solution of his photographic difficulties on account of the number of textbooks, catalogs and printed instructions that meet his gaze on all sides. Later on, he will find that the books and instructions would have helped him immensely; but he was not prepared at the time to appreciate their value. All of which leads to our advice to obtain a copy of "Pivotal Points in Photography," issued by Burroughs Wellcome and Company, manufacturers of the well-known "Tabloid" photographic and pharmaceutical products. In this attractive, well-written, illustrated booklet the reader will not be troubled by superfluous photographic "trees" which otherwise might obscure his vision of the pathway to photographic success.

Photography and Art

A LEADING article in *The Times* recently, on the subject of art and photography, seemed at the first glance to be intended to reopen an old controversy, a controversy which, as far as photographers are concerned—and they alone are in a position to form a correct view—has settled itself. A study of the article, continues a British editorial, revealed the fact that it was only concerned with the use of photographs of paintings in art-teaching, a use which *The Times* writer and the headmaster of some unnamed art-school agreed in condemning. If nothing more were meant than to suggest that it is far better for a student to be able to study the original painting than any monochrome photograph of it, no one would be likely to take any exception. Manifestly, the original would be the better. But when the article goes beyond that, and avers a preference for a copy by hand into which the copyist has introduced some of his own personal expression, telling us not what the painting is, but what it seems to him to be, the ground is much more debatable. The impression we gathered was that the writer in question had only the journalist's or the painter's knowledge of photography; if he had a real familiarity with its processes, he would take a different view, both of its fidelity and of its mechanical character. It was evident that he believed a photograph of a painting to be necessarily something of the nature of a rigid facsimile. A photograph of an engraving, pencil-drawing, or other monochrome-design may be so strict a fac-simile that it would need an expert to tell the original from the copy; but the moment the question of the reproduction of color in monochrome is introduced, the case is different. It is true that a strictly literal photograph can be made, but it does not at all follow that it will be.

THAT PLEASANT EXPRESSION



Courtesy of Boston Traveler. Chicago Tribune, copyright

"THE GUMPS", CARTOON BY SIDNEY SMITH

That Pleasant Expression

ONE of the most popular cartoons published by the *Boston Traveler* is the continuous, daily performance by Mr. and Mrs. Gump, in which either or both of these characters may be seen. It is either the eccentric philosopher, Andy Gump, with his dry humor and retrospective views of life, or his practical, faithful spouse with a lot of good, common sense, who engages our attention for a few happy moments every evening. Once in a while, the topic of discussion or dispute is of an artistic character, and when it happens to be of interest to the photographer, or the artist, we are glad to present it to our readers, as is the case to-day. For this privilege, we are indebted to the courtesy of our brother-editor of the *Boston Traveler*, and to the *Chicago Tribune*, by whom these cartoons are copyrighted.

Another Step in Simplified Developing

WITHOUT a doubt, the popularity of amateur photography is due, in large measure, to its simplification by the leading manufacturers. The so-called "messy" operations have been virtually eliminated for the beginner and the amateur. In fact, a darkroom is more of a luxury than a necessity for the average camerist. Even a developing-tank is no longer needed. The Sweetland Daylight Film Developer, patented by Ernest J. Sweetland, may be carried in an overcoat-pocket. Results equal to the best darkroom development have been obtained at a minimum of expense and time. Burke & James, Inc., who are introducing this latest step in simplified developing-equipment, will be glad to supply further information.

The Camera Bargain-List

WERE it not for the reliable camera-exchange, there would be many amateur and professional photographers who would be unable to afford and use the photographic equipment that they desire or really need. A well-prepared camera bargain-list is the means used by camera-exchanges to call attention to their stock of cameras, lenses and accessories. Obviously, no bargain-list can remain up-to-the-minute for more than a short time as the items listed are usually sold before many days. Hence, when an exchange as well known as *ABC Cohen's Exchange, Inc.* announces a new bargain-list, it is advisable to obtain it as soon as possible. It should be remembered that orders to camera-exchanges are filled as received; and that second and even third choices should always be given.

J. Herbert Saunders—Lens-Representative

MR. J. HERBERT SAUNDERS of Leeds, England, who is well known to PHOTO-ERA readers for many years past as a successful contributor to *Photo-Era Advanced Competitions*, where he has won a number of prizes, has been appointed the British representative of the Struss Pictorial Lens. As Mr. Saunders is a pictorialist, in every sense of the word, and an intelligent user of the soft-focus lens, he will contribute materially to the success, in Great Britain, of the American optical product.

A Real Service

It is always pleasant to see a thing done that will be of benefit to a large number of persons. It is good business for a manufacturer to push his own products and to give them the best possible publicity. However, it is gratifying to note that in the photographic field a number of manufacturers give the amateur and professional photographers the benefit of results achieved by exhaustive and expensive research-work without insisting that their own products be used. In this connection, the Ansco Company has issued recently a little folder, "Tank Formulas for Developing Roll-Film," that will enable the photo-finisher to make up an excellent tank-developer to suit any and all standard roll-films. The formulas are so given that quantities from one gallon to forty gallons may be prepared easily and quickly. It may not be amiss to add that readers who own, or would like to own, a good vest-pocket camera will be interested to read the new folders now obtainable from the same company or from photographic dealers.

J. W. Pondelicek, Professional Illustrator

JAMES WALLACE PONDELICEK, the well-known photo-pictorialist and interpreter of portrait-characterisation, has associated himself with Robert Conklin, widely known among advertisers and publishers, the two constituting the firm of Pondelicek and Conklin, prepared to furnish original photographs, on order, for illustrations of the highest artistic character.

Work of Mr. Pondelicek has appeared in PHOTO-ERA MAGAZINE, during the past few years, showing him to be a master of composition and figure-photography. We wish these two artist-workers all possible success and prosperity.



LONDON LETTER

CARINE AND WILL CADBY



THE experienced photographer's nightmare is that one day photography will come to an end, and that there will be nothing left to do but the old, old subjects, treated in the old, old manner; and it was rather with this pessimistic spirit that we went to see the new exhibition of the London Salon.

We need not have entertained these gloomy apprehensions, for had we not heard rumors of a wonderful invention which was to link up sculpture with photography, and to create bas-reliefs instead of black-and-white prints? However, quite apart from this sensational innovation, this year's Salon proves that photography is still going ahead. It is a cheery and stimulating show, and there are plenty of new ideas. But what one would like to do would be to sort them out—to have one end of the gallery for the new, and the other for the old, for there is no doubt that the public would consider itself cheated if its old favorites found no place on the walls. But, personally, we think that unless these exhibitors feel their work to be better, or at least different, from that of last year, it would be sound to take a holiday for a time till they get a fresh mental outlook.

Somehow, the old, old story in photography is depressing. We are bored with the same ideas and the same treatment; but it is a sheer delight to come face to face with such a print as that called, simply, "Portrait," by the Earl of Carnarvon. It is not only good technical photography, but is inspiringly original. The face is entirely in shadow, but luminous, story-telling shadow, a highlight being placed *below* the chin—a somewhat daring arrangement, the subtle effect of which seems to us as interesting as anything in the exhibition. There are not many portraits, this year; but with few exceptions they are remarkably good. James Whale, as Slaney in "Abraham Lincoln," by Mr. Hugo van Wadenoyen, Junr.; Professor Einstein, by Mr. Walter Bennington; Rutland Boughton, by Mr. Herbert Lambert; Mr. Mortimer, by Mr. Luboshez, and Vieja Vasca, by Mr. A. Koch, are all excellent.

The weakest section of the show, to our mind, seemed to be the pictures of children. There is a clever study by Mr. A. F. Kales, called "At the Kiddies' Ball." It is all right except the title; for the two figures, goose-stepping along, give one no impression of childhood. They might be grown-ups. Mr. Marcus Adams shows several child-portraits, but so highly retouched and artificial-looking, that their right place would seem to be in a show-case. When we think what wonderful child-studies Mr. Adams used to produce, one wishes success had not swept him along so fast, leaving him no time or, probably, opportunity for experimental work.

Mr. H. A. Avery is new to us, as an exhibitor. "Happy Moments"—a strong effect of lighting—shows some little Chinese boys playing what looks to be Hide and Seek. His other print is called "Terror," and our thought, as we looked at it, was "However did he get it?" There is genuine suggestion of real alarm, and the figures are placed so near up, passing across the scene, and obviously in hurried flight, amidst dust and turmoil, that we instinctively turn—as one of

them is doing—to see the horror that is pursuing. Were these Eastern people, Chinese, Koreans—or whatever nation they belonged to—really alarmed, or is it only a very clever piece of oriental acting?

The grotesque-dancing-study craze seems still to draw some adherents; but there is a refreshing corrective in a simple dance picture by Mr. A. Remfeldt, a Norwegian. Nudes abound this year; but there is nothing of outstanding merit, and we can only surmise that the abnormal summer of three months, intensely hot and dry, has had something to do with their numbers. Mr. Warburg has rather an amusing exhibit called "The Second Sitting." It is a portrait of a woman sculptor, working on a bust of Mr. Warburg. We should have imagined by the advanced appearance of the work—already quite a good likeness of this well-known photographer—that it was more likely a last sitting.

And this reminds us that we have not yet touched on that important subject at this year's Salon, "Sculpture by Photography." This invention is by Mr. H. M. Edmunds, who calls it "Photo-Sculpture." It consists of the mechanical translation of the photographic image into carved relief in marble or wood, or other hard material. There are two examples at the exhibition, one in marble and one in wood. They are placed on a table, and alongside is a copy of the *Amateur Photographer*, open at an article in which Mr. Edmunds describes his invention. There is a chair to tempt visitors to sit at the table and admire. But having unscientific minds, and, perhaps, not feeling very inspired by the little examples (not more than three inches in height), also knowing that PHOTO-EXA readers would have the invention described to them in illuminating technical language, we did not tarry long in the chair admiring the bas-reliefs, neither did we read the article. But it is no doubt a wonderful invention, and possesses extremely interesting possibilities. It may lead to quite new developments in photography, besides proving a valuable guide to sculptors.

We are promised extremely interesting and valuable revelations in X-rays work at the exhibition of the Royal Photographic Society, which opens in a few days, fuller particulars of which we hope to give in our next letter. It is claimed that a new process (examples will be shown) besides considerably reducing the risk of X-ray dermatitis, will enable the operator to make a photograph of the object, that shows not only what it is, but its exact location, depth and position.

The Kodak Company has taken a momentous decision in publicly announcing that it will manufacture no more glass photographic plates. The intention is to make only the flexible Portrait Film that was first introduced into this country in 1914. There are brands of plates made by this company that are used and relied on extensively by professionals, and it is only natural that workers who have become familiar with a particular make, know exactly its advantages, and how to make the most of them, should view with some annoyance, and even dismay, the sudden with-

(Continued on next page)



RECENT PHOTO-PATENTS

Reported by NORMAN T. WHITAKER



THE following patents are reported exclusively for PHOTO-ERA MAGAZINE from the law-offices of Norman T. Whitaker, Whitaker Building, Washington, D.C., from whom copies of any one of the patents can be obtained by sending twenty-five cents in stamps. The patents mentioned below were issued from the United States Patent-Office during the month of September.

Patent, Number 1,389,615, has been granted to Anthony A. Barber of Newark, N.J., for Photographic-Printing Frame. The patent has been assigned to B. & B. Photo Co., a Corporation of New Jersey.

Colored Image and Process of Producing the Same has been patented—patent, Number 1,389,742—by John I. Crabtree of Rochester, N.Y., and assigned to Eastman Kodak Company of Rochester, N.Y.

Morton P. Sarfaty of New York, N.Y., has been granted patent, Number 1,389,992, for Photographic Camera.

Patent, Number 1,390,252, has been granted to Joseph Thomas Smith of London, England, for Color-Photography.

Dissolving Shutter for Cameras has been patented by Hugo Enders of Leighton, Pennsylvania, patent number being 1,389,938.

Ashley Guy Ogden of Baltimore, Maryland, has invented and patented a new and useful Printing-Machine, patent, Number 1,388,968.

Patent, Number 1,389,164, has been granted to Andrew H. Røikjer of Boise, Idaho, for Back-Lock for Cameras.

Photoprinting-Box has been patented by Clarence LeRoy Parks of Seattle, Washington, the patent number being 1,389,268.

Motion-Picture Annual, 1921

THOSE of our readers who patronise motion-picture theaters—and how many do not—will be interested in the Motion-Picture Studio Directory and Trade Annual for 1921 issued by the Motion-Picture News, New York City. The book contains the pictures and short biographies of virtually all the leading players, men and women; and, in addition, much information with regard to well-known directors, cameramen, producers and dealers in motion-picture supplies. As a reference-book for the patron of the motion-picture theater and the photographer who wishes to keep in touch with the motion-picture field, this latest annual will be of much interest and value.

"Camera to Bare Secret of Mars"

WOULD it not be a splendid achievement for photography if by its means we should be enabled to obtain accurate data with regard to the planet Mars? A recent newspaper dispatch in the *Boston Herald* bore the heading quoted above. According to the report, it is proposed to "snapshoot" the planet by using an abandoned mine-shaft in Chile as the barrel for a telescope. A large pan of mercury, revolving at high speed at the bottom of the shaft, is to provide the mirror. The pool of mercury will be revolved at such high speed that it will assume a concave shape and

thus become a mirror of great power and luminosity. The depth of the fortunately-placed shaft is so great that there will be sufficient luminosity, according to the scientists, to enable them to make snapshots instead of time-exposures. Whatever we may think of the plan, it is hardly advisable in the light of recent scientific achievements to say, "it can't be done."

Coloring Prints of Autumn-Foliage

POSSIBLY, nowhere in the world can be seen such gorgeous, resplendent autumn-foliage as in America, particularly in the months of October and November. In some localities of New England, for instance, beautiful, colored autumn-foliage remains until late November, and it should be the duty of every camerist to procure some of these photographs in monochrome, using appropriate color-sensitive plates and ray-filters. When making the necessary exposures of these wonderful masses of color, it is well to indicate in a note-book, together with a brief sketch of the scene, the various colors and how they are placed. This color-key will enable the camerist to color either contact-prints or enlargements from the resultant negative—doing the work with accuracy. Those who do not make autochromes of these memorable scenes of nature, may make negatives and prints in the usual way and, later, when convenient, color the prints with any of the standard colors advertised in, and endorsed by, PHOTO-ERA MAGAZINE. Foremost among these standard colors are Rochrig's Transparent Oil Photo-Colors; Japanese Peerless Permanent Photo. Oil-Colors (made by Japanese Water-Color Co.), and Devco Photo-Oil-Colors (made by Devco & Reynolds Co.). Attractive folders may be had at request.

Christmas is not far off, and no more appropriate gift can be made than a finely colored photograph—either a large contact print or a direct enlargement—of a scene which cannot be matched in any other part of the world. Such a gift has the added value of personal interest and will be a permanent source of satisfaction to both maker and recipient.



London Letter

(Continued from preceding page)

drawal of their well-tryed medium, especially if their business has been built up on it. To start afresh with a new brand of plates appears at least a somewhat formidable inconvenience. Many professionals have already taken to the portrait film, and so are relieved from these worries, but to the others the time has come when they must make a definite choice between, to them, a new plate (and there are, of course, many excellent English brands) and portrait-film. We are instinctively a conservative people, and any idea of change is not congenial; consequently the plunge into portrait-film is attended with doubt and trepidation. But we do not doubt that it will be made by the majority, for the advantages are so numerous, and we have in the past often referred to them on this page.



SPEAKING OF PORTRAIT LENSES

Frequently, a studio can get along with one lens, such as our general-purpose Velostigmat Series II F:4.5. But to meet present day competition, and turn out the fine quality of results that discriminating customers demand, a strictly portrait type of lens is a most valuable asset.

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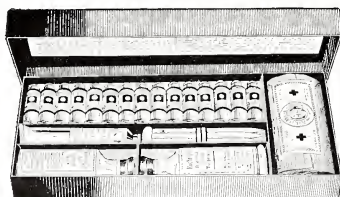
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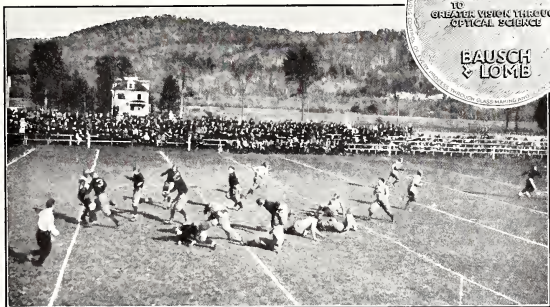
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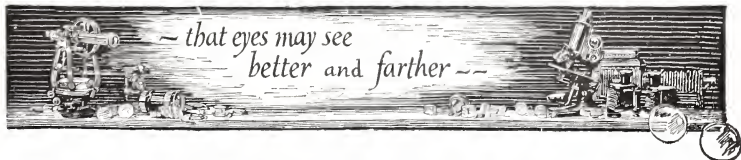
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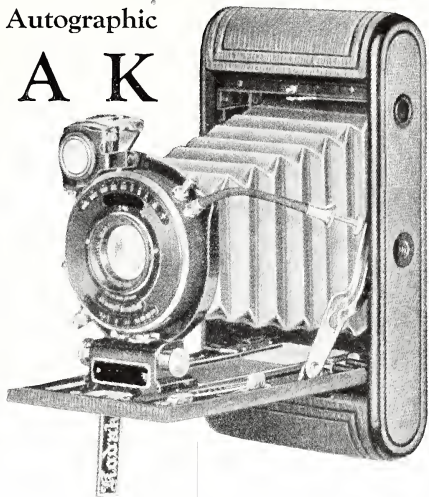
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Any photographic or art-book, not in this list, will gladly be procured at request.

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Airplane-Photography	Herbert E. Ives	\$4.00	Dec. 1920
American Annual of Photography 1921 (cloth)	Percy Y. Howe	2.50	Jan. 1921
Behind the Motion-Picture Screen	Austin Lescaboura	3.50	June 1920
Condensed Course in Motion-Picture Photography	N.Y. Institute of Photography	6.00	Aug. 1920
Everyman's Chemistry	Elwood Hendrick	2.00	Dec. 1917
Handbook of Photomicrography	H. Lloyd Hind & W. B. Randles	4.00	June 1914
How Motion-Pictures Are Made	Homer Croy	4.00	Jan. 1919
How to Make Good Pictures	Eastman Kodak Company	.40	
How to Use the Air-Brush	Samuel W. Frazer	1.50	
Light and Shade—And Their Applications	M. Luckiesh	3.50	
Modern Telephotography (paper edition, \$1.50)	Capt. Owen Wheeler	1.75	Aug. 1910
Optics for Photographers	Hans Harting, Ph.D.	2.50	Aug. 1918
Photo-Engraving Primer	Steven H. Horgan	1.50	Nov. 1920
Photograms of the Year 1920	F. J. Mortimer, F.R.P.S.	3.50	Mar. 1921
Photography and Fine Art	Henry Turner Bailey	2.50	Apr. 1919
Photography and Its Applications	William Gamble, F.R.P.S.	1.00	Nov. 1920
Photography for Students of Physics and Chemistry	Louis Derr, A.M., S.B.	2.25	Dec. 1913
Photography in Colors	George Lindsay Johnson	3.00	Sept. 1914
Photography—Its Principles and Applications	Alfred Watkins, F.R.P.S. <small>English Edition</small>	4.00	Apr. 1920
Photography of To-Day	H. Chapman Jones, F.R.P.S.	2.50	Dec. 1912
Pictorial Composition in Photography	Arthur Hammond	3.50	Aug. 1920
Pictorial Photography in America 1921		3.00	Jan. 1921
Practical Kinematography and Its Application	Frederick A. Talbot	1.50	
Practical Photo-Micrography	J. E. Barnard	5.00	
Professional Photography (two volumes)	C. H. Hewitt	1.75	May 1919
Saturday with My Camera	S. C. Johnson	2.00	Nov. 1914
Systematic Development of X-ray Plates and Films	Lehman Wendell, B.S., D.D.S.	2.00	Feb. 1920
The Air-Brush in Photography	George F. Stine	3.50	Nov. 1920
The Commercial Photographer	L. G. Rose	4.00	Oct. 1920
The Dictionary of Photography	E. J. Wall, F.R.P.S.	5.00	July 1917
The Fine Art of Photography	Paul Lewis Anderson	3.00	Nov. 1919
The Fundamentals of Photography	C. E. K. Mees, D.Sc.	1.00	Oct. 1920
The Optical Projection	Russell S. Wright	1.60	Nov. 1920
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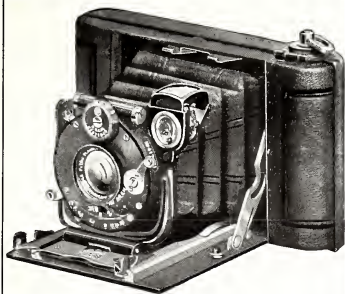
A Treatise on Art. In Three Parts	John Burnet, F.R.S.	\$2 00	Dec. 1913
Art-Treasures of Washington	Helen W. Henderson	3.00	Feb. 1912
Boston Museum of Fine Arts	Julia De Wolf Addison	3.00	Aug. 1910
Composition in Monochrome and Color	Arthur W. Dow	5.00	Apr. 1913
How to Study Pictures	Charles H. Caffin	4.00	
Picture-Dictionary	J. Sawtelle Ford	1.00	Oct. 1917
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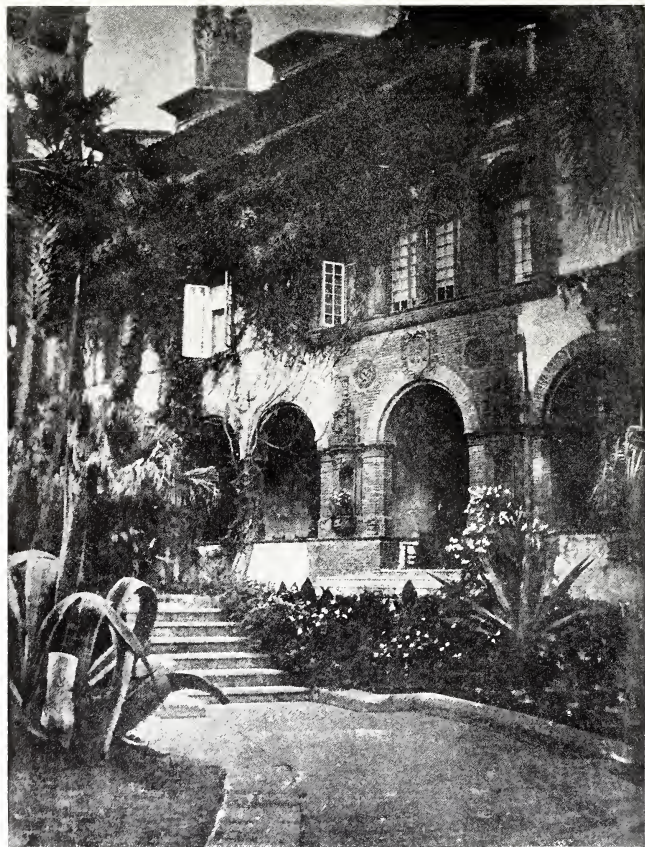
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Vol. XLVII

DECEMBER, 1921

No. 6

Florida Impressions

THOMAS S. CARPENTER



My first journey to Florida was not wholly fortunate, and in consequence I, like many others, formed an unfavorable impression of the country. This was before a railroad extended below Titusville on the east coast. Hotels were scarce and poor, living off the country was difficult, and the "tin-can" period had not reached its present development as a fine art. At Titusville, we chartered a power-boat to take us to Micco, near the Sebastian River. I recall that, as we approached the village of Cocoa, on the Indian River, our captain asked if we could make out the form of a woman standing on the roof of a piazza, a long distance ahead, remarking that it was his wife and he had no doubt that she had been standing there two days, as he was that much late. I have never returned to that part of the state, yet its great beauty, especially when seen by moon and star light, remains fixed in my memory, and when my thoughts revert to it, the call to return is strong. Florida has made great progress since those days and will, in time, stand very high in statehood. Railroads have done much to aid development; fine highways, which are in the making, will do more. At present, road-improvement is somewhat spotted; but in general it can be said that excellent, though sometimes narrow, roads connect the principal cities, towns and villages.

Within a few years, thousands of automobile-campers have left the chilly North in the fall or winter and headed for the land of sunshine, flowers and the "Fountain of Youth." In all sorts of machines, variously equipped, they roll and bump along to the land of promise. Sometimes, one wonders at their hardihood, because of the extremely bad condition of some of the roads north of Jacksonville. Good nature, however, will carry one far, and this world-winning

quality, coupled with gasoline, laughs at difficulties. The Florida nature seems always hopeful. The new-comer imbibes more or less of this and is all the better for it. There are, sad to relate, some hard shells who never succumb to it; yet Florida smiles on, always cheerful, always hospitable and always herself.

Many northern people, on arrival, make the mistake of criticising southern methods. They know that the lawns need mowing and that every loose thing should be picked up, that folks should hustle all day long for American coin, that they must learn how to raise and market crops and a whole lot of similar nonsense. One of my friends got bravely over his first impressions by suspending judgment two weeks.

In western Florida we startled the natives by our persistent walking. They told us no one ever walked. I am certain that we had no standing with them.

In a general way, it probably will be found that a quiet, slow study of a promising locality will yield more and better information, as well as beauty-studies, than a gatling-gun-like charge across the country, which so many practice. It will not do to check up Florida like a bill of lading, or as one can some of the scenic guide-books, crossing off scene number one and rushing off to scene number two before it gets away, as I have seen done at the Grand Canyon in Arizona. The appearance of Florida-towns is improving, some of them being very satisfying, others leaving much to be desired. A shabby southern town is merely that, never soddan, being a combination of no architecture, no mechanics and less money. In contrast, there are settlements which contain homes and estates of great beauty, having an appearance of warm hospitality. Such places are positive enough in their welcoming characteristics to attract the eye and stop the feet of the pedestrian. Many homes are



PONCE DE LEON HOTEL

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surrounded by wonderful flora, some native and others transported from still warmer climes. Some of these settings are the product of landscape-architects, being of the well-planned, geometrical, city-park-like character, whereas others are left in a semi-wild state, which permits the imagination to have free play for study and restful contemplation.

As elsewhere, complete harmony of architecture, setting and approach is rather rare, but it does exist and the humble searcher will at times in his wanderings find his labors rewarded.

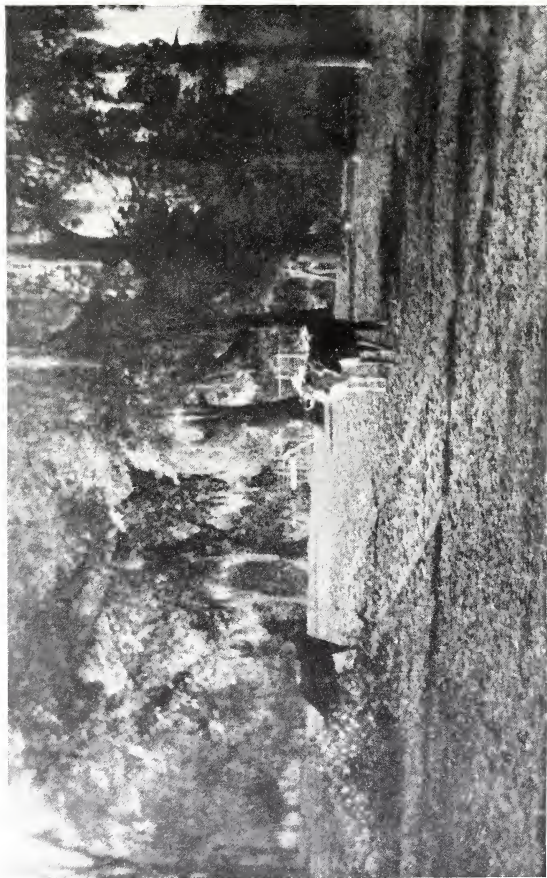
There is much natural beauty to be found in wild, generally low, spots, filled with mystery, rarely entirely silent, the slightest sound, like the rustling of a leaf, being audible. One of the charms of such favored spots is that of the bird-life, still so plentiful in Florida, sometimes musical and always companionable. The atmosphere of such places is constantly changing, at times filled with fog, then varying in all the drying stages to brilliant sunshine. It is a

country of fine skies and wondrous clouds, in the warmer months, particularly, rapidly changing. Showers, always refreshing, come and go, usually local, touching favored spots only in their travel. Sometimes a huge volume of water falls, the writer having seen a perfectly dry village-street become a stream of solid water within the space of a few minutes. Winter, although never completely rainless, is the driest of the seasons, having a smaller rainfall than most winter-resort states, which probably contributes to its popularity among tourists.

Experiences vary so much, that it does not seem wise to make claims for the good features of a locality; it is much safer to chronicle only one's own experiences. After a series of visits made at odd times during a period of thirty years in all the months from November to June, I have not found the climate enervating, nor the country other than entertaining. Florida in my time has had both staggering trials—like destroying freezes—and cheering successes—like the



OPEN-AIR CHESS
THOMAS S. CARPENTER



VILLAGE STREET-SCENE

THOMAS S. CARPENTER



SPONGE-FLEET

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rehabilitation of the citrus groves—and the wonderful upbuild of the state, in many ways. Florida has become one of the healthiest of states and, as time passes, it will attract increasing attention as a natural sanatorium.

There are many flourishing industries, ranging from sponge-gathering in the Mexican Gulf to trucking on the east coast, and fruit- and nut-growing over much of the state. There are strawberry, tobacco, celery and other gardening districts, as well as phosphate-mines, lumber and other milling enterprises. All are picturesque, some being of surpassing commercial and mechanical interest. Although the "buzz-wagon" can be used, the natural means of locomotion still seems to be best for the interested one who wishes to study the pictorial possibilities of the state; though, at times—due to great distances—one will make use of both railroad and automobile. Some parts of the state are covered by

a bus service. One of these affairs will carry about eighteen persons at railroad-rates, and, sometimes, their trunks in addition. As the roads diverge away from rail-travel, passengers have the opportunity to see sections of the state which are different and of much greater interest. It is a cheerful and ready way to travel, though apt to be crowded in the height of the season. Some travelers carrying grip-sacks and suit-cases circulate over a large part of the state in this way, stops being made for luncheon. It is the nearest approach to stage-coach days that we have. By boat, one can reach famous rivers like the St. John's, Oklawaha, Anclote, Manatee, and others. De Leon Springs and Silver Springs are quite wonderful in their way, and should be visited.

Jacksonville, a modern city with a population of one hundred thousand, is the front door of Florida and in photographic materials as well as

most other things is the source of supply for a large part of the state. All railroads radiate from there like the spokes of a wheel. The Clyde Line has an excellent boat-service up the St. John's River as far as Sanford. The Oklawaha River and Silver Springs trip may be made from Palatka on the St. John's or further west from Ocala. De Leon Springs is located nine miles north of De Land, the home of Stetson University and a charming city blessed with several good hotels.

Boats make the Anclote River trip from Tarpon Springs, which besides being the headquarters of the sponge-gathering fleet, is a little city of considerable charm. The Manatee River may be visited from Bradentown. Let me say to the followers of Walton's rod, that Florida offers much, her lakes and rivers, as well as salt-waters, being veritable mines of living food. What is finer eating than a pompano or a red snapper?

Everybody has heard of Georgia and Florida "crackers," but few understand the meaning of the word. After making some inquiry, I was given the following explanation: In the early days, certain Georgians drove cattle into Florida to graze during the winter-months. These cowmen used long raw-hide whips, having snapper-ends, which they could flourish and draw in a way to make a cracking sound. As they drove their herds and cracked their whips, children along the way would cry out, "The crackers are coming, the crackers are coming!" In this way, cattle-men in both states became known as "crackers," which term has in time settled upon many natives.

There is no doubt that the tourist-parts of the state are being steadily and persistently photographed and will continue to be, for all time; yet, after all the snapping of shutters there will always be opportunity left for serious workers. Very many laugh at the idea of there being any really beautiful scenery in Florida, because they draw their conclusions from their snap-impressions as they pass through the pine-lands and swamps on the way to their destinations. Some are so convinced of this, that no different reasoning reaches them. We can but be sorry for them and are led to wonder how much they pass by in other sections. I remember being asked in Colorado and Utah, while we were passing through wonderfully colored scenery, to help out in games of cards, these being introduced because there was "nothing to be seen but mountains." It is not always wise to accept the opinions of all travelers, as so many are wholly blind, and are unintentionally spoiling some fine moments for others more studious and thoughtful, who find

keen delight in places which have been condemned by their acquaintances.

Some of my best negatives were made in a village once visited by a friend who told me that he ached to take the first train out. How any one could live in such a place was beyond his understanding.

The willing visitor should not overlook a visit to St. Petersburg, if only to watch the games that are being played in the open every weekday and evening. Roque, quoits, dominoes, checkers, chess, tennis, lawn-bowling, golf and perhaps others, hundreds of people playing these innocent games and thus by the life in the open, prolonging their days and becoming more efficient workers and better men and women. Visitors to the state can find much that is attractive outside of tourist-resorts. Comparatively few northern people visit north-west Florida, still in appearance the *ante-bellum* South, thus overlooking a section of considerable human interest and much beauty. Those in the vicinity should try to be present on a Saturday at Tallahassee to watch the shoppers come in from far and near, hauled and carried in every possible way by every moving thing, all delightfully picturesque. Tallahassee, the state capital, is a small city situated about a hundred and sixty miles west of Jacksonville in Leon County, a section of rolling hills and quite different in all ways from the peninsular part of the state. We were well cared for at the Leon Hotel, where we found more southern than northern guests. Travel is via the Seaboard Air Line Railway from Jacksonville. Historically, St. Augustine is the mecca of Florida visitors, and is of further pictorial interest because of its Moorish and Spanish architecture. Further south lie the Halifax and Indian Rivers sections, more modern but of great scenic beauty.

All the principal towns and cities of Florida have hotels of varying grades, some ultra-fine with extensive grounds, golf-links, swimming-pools and other entertaining features. Few can afford to pay the charges of such places, but there are usually others nearby with simpler service and lower costs. The hotel-story is too extensive for introduction here. All the leading places have Boards of Trade which supply all information by mail or otherwise, when so requested. A goodly number of guests are located through the efforts of these Boards. Certainly, photographers can be accommodated everywhere. One must be a gentled loafer to learn the pictorial possibilities within the state. Surely, hurry will accomplish little. But is not the pictorialist's task one of watchful waiting? And if we concede this, having learned that both climate and



IN SAN SUI
THOMAS S. CARPENTER



THE PALAMEDES
THOMAS S. CARPENTER



habit favor restful study, that much can be learned by quiet penetration, a humble spirit and open mind, it may be a good time to tell something about my picture-studies. And in opening this subject, I do so with hesitancy because there apparently is no one right way in photography. If you doubt this, read the criticisms in the photographic magazines. I have striven to make these Florida prints true to the section in which they were made, retaining its characteristics so that they will be immediately identified as such. In doing this work, it has been my aim to interpret Florida quite as much as to make pictures, and I believe that a measure of success has been reached in both fields of endeavor. Scenes which in general shape into the picturesque but lack an appearance of the tropics, I have usually but not entirely avoided. If a Florida-scene might just as well have been photographed in Massachusetts, why go to Florida after it? Photography has a large field of expression to work in, perhaps greater than is generally recognised, a dignified and delightful sphere of usefulness in which there seems to be little competition. It would seem, however, as if too few photographers pay sufficient attention to composition and to the best printing-methods, thereby missing opportunities to produce really fine results. Better things will displace much of the trash that is with us and will help to obtain the recognition which photography deserves.

I do not know that Florida has never been properly photographed, but I can say that it has not been my good fortune to find pictures that conveyed a satisfactory interpretation of the Florida that I have learned to love, and a desire to capture my Florida grew so strong that two years ago I determined to make an attempt to do this for my own satisfaction and for the pleasure of my friends, to whatever degree I was able. The work has gone on for three seasons, until I have some forty prints which more nearly convey my impressions of the true Florida. They are printed in four different processes, the attempt being made to use the process best suited to express the tone and feeling of each scene, as far as might be possible in my hands. My exposures were usually made rather early, from 8.00 to 10.30 if in the morning. One cannot get the strength of sunlight in most instances until the middle of the forenoon, the sun not being high enough to penetrate the foliage. If too late in the afternoon, one may meet with the same difficulty and there is but scant twilight.

It seems to me that the state needs the sunlight it so copiously receives, and residents tell me that this is so, as they feel depressed when an occasional sunless period occurs. My studies

of the scenery have been made mostly on foot, often going to a spot under consideration several times for study of the best lighting-conditions, and it seems to me that, as the old darkey said, we must "thank God for the activities in our laigs." In the hurry of modern life, some of us miss much, which is so well expressed in "Adventures in Contentment." Many visitors—I may, perhaps, say the majority—return to their northern homes much too early and, unfortunately, never see the state at its best. They do not realise that plant-life, here, has its winter-rest period, and that they see it in only part-development. If their visits could be prolonged through April and, perhaps, May, they would have the benefit of newer colorings, more flowers and an altogether fresher beauty. The sojourner should be a bit odd by ignoring the migration of his kind, staying to watch the thing through. Leave the resorts, seeking nature's Florida, the back-country anywhere and everywhere over the state, returning at last filled with wholesome experiences and pity for those who spend all their time in northern-made resort-towns, playing bridge and doing all the things which they can do at home. Be a reacher after something different; then come away really satisfied. Think of rowing out among lily-pads two feet in diameter with blossoms in proportion, where birds walk over them as on the solid ground, and peck away at the lilies as if they made quite delicious eating.

Some Florida fresh waters, brown with vegetable stain and not at all transparent, become wonderfully mirrorlike, the reflections extending to great depths, startlingly clear and beautiful. We all know how fine photographs appear in solutions or in water. Imagine nature serving in a similar way, in natural colors deepened and beautified. A journey up Haw Creek, near Crescent City, might be called one of revelations so wonderfully reflective is nature's mirror. Just at dusk we may observe bird-life adjusting itself to the changed day, night-flyers appearing while day-flyers return to their nests. A live and different world for study; a bit weird, but appealing. One can find eagles and their nests, but must not court too close an acquaintance. And the state has a butterfly all her own, the Palamedes, dressed in black and yellow, which, after a merry chase, I succeeded in capturing on the wing as it was descending to quaff the nectar from a thistle-blossom. It seems unfortunate that we cannot photograph the perfume of orange-blossoms, or the hum of bees as they gather their sweets, sometimes thousands at work in an orange-grove, the air vibrating with their industry.

I am asked to supply data concerning the work, which, however, is not so easy as it may seem, because of a partial shortage of records, due to my handling each print as an individual, the technicalities of the work in hand not concerning me so much as the finished print. But I am able to generalise and, to do this properly, must turn back a few years. I had worked, I suppose, about the same as thousands of others, occasionally hitting the bull's-eye, but more often missing. I believe due to many things, but more particularly to sticking too closely to old methods. A study of the results of motion-pictures caused me to attempt the use of the miniature camera with its perfect lens. I reasoned that if motion-pictures could be enlarged many thousand times, prints from small negatives might stand reasonable enlargement, especially as the short-focus lens has such perfect depth and covering-power. The little lenses must be credited with the elimination of back-ground "whirligigs" which were so annoying in the old days. With a lens capable of giving a perspective approximating that of the human eye, softening and blending the distance in a natural way, we have a very attractive tool to employ. One may do almost anything desirable with a good negative in contrast to the difficulties encountered in printing through a poor one. The old argument concerning the long- and short-focus lenses comes to the front in making claims for the latter, and there is truth enough in the long-focus contention to support it; but foreground-distortion can often be eliminated in the enlarging-scheme by using but a part of the negative, thus making a long-focus result from a short-focus negative. I am, therefore, a friend of the short-focus lens. As I have insufficient space for an extended argument, I will content myself with a simple statement asking the reader to be indulgent. I am using three miniature cameras all having anastigmatic lenses, one $2\frac{1}{4} \times 3\frac{1}{4}$ with a 4-inch lens, one $1\frac{3}{8} \times 2\frac{1}{2}$ with 3-inch lens, and one $1\frac{1}{4} \times 1\frac{3}{8}$ with 2-inch lens. The lenses cover well, have great speed, working at F/3.5 and F/4.5 and are long enough in focus for most subjects. They can, as explained, be used in their short, medium, or long-focus relations. There is no difficulty, whatever, in enlarging up to 8 x 10 and 11 x 14 and, in some instances, up to 14 x 17. The exposures, usually, are fairly rapid and range from 1/10 to 1/100 second. As my hands are very steady I have been able to work as low as 1/5 second. For any ordinary work the lenses are used with full opening to get the best possible exposure and to obtain roundness of subject.

For photographic exposures, the climatic conditions are excellent, the days being gener-

ally sunny, the light strong though soft, its actinic quality being considerably more penetrating than it would be in the same season in the vicinity of Boston. As much of picturesque Florida lies in partial shade, the bright light is a great help in getting full exposures. It will be found safest to use exposure-meters, thus preventing great mistakes in timing—at least, until the camerist becomes accustomed to the conditions. In the most important cities, like Jacksonville, St. Augustine, Orlando, Miami, Tampa, St. Petersburg, and others, one may have films developed and prints made quickly and cheaply, perhaps as well as such work is commercially done anywhere. In a tourist-state, like Florida, where thousands of camerists are at work, photo-finishing establishments flourish. I have never heard of any camera-clubs or of public or semi-public darkrooms, but with tank-development for negative-making they are not needed. It is always a safe practice to develop reasonably soon after exposure as too much delay may cause granular negatives. Films may be purchased in all places larger than villages; but one must be sure to get recent dates. Florida being a seasonal state, chemicals may not carry over well and I distrust them. After a sad experience with some, I had them mailed to me from the north. In development during the warm days, ice must be used to keep the temperature of the solutions down—and the wash-water as well—otherwise thick, slow-printing negatives may result.

The development of films has been in tank, Eastman powders being used. As all the prints other than bromides are made in contact, I have had to make enlarged negatives, a time-consuming and costly affair, but usually certain and satisfactory. Both positives and negatives were made on Eastman cut films, either process or commercial. The films suit me, because they can be cut to any size, are light in weight, easily stored, and can be printed as well from either side. They are negatives produced with pyro, the old reliable. Printing is a serious matter. One must remember that the non-photographic observer knows little about processes and cares less. He looks at results, condemning or liking at a glance. Many understand picture-construction and lighting, and in some instances better than the man who is filled with technique. Photographers must gain the good opinion of the average man and, to do this, the proper appeal through well-designed, well-printed and expressive prints must be made. Prints which are developed by being soured in a bath are mechanical at best, and in theory, at least, lack individuality. Understanding this, I wanted the privi-



A FLORIDA PASTORAL

THOMAS S. CARPENTER



A JUNGLE-SCENE
THOMAS S. CARPENTER

lege to control the progress of the printing, and have been to some trouble to learn and practice printing of this nature. All the Florida prints have been made in this way, either in platinum, palladium, gum or bromoil, and I may as well add that it has been time "jolly well spent," as I look upon it. After it has been decided what method to use in printing from a particular negative, the worker can favor the negative and subject as the work proceeds, many times getting results not to be attained in any other way. Controlled platinum or palladium development is usually certain and capable of rendering beautiful results; but this depends very largely on the worker's skill and temperament. Where light and shade lie in masses, bromoil approaches fine art when well executed. It has been said that the secret of bromoil-printing is patience. In my humble opinion, it will depend upon many things; but once it is learned, the ambitious one may attempt anything dictated by his fancy and will ascend into a realm of absorbing interest and, I hope, great joy. Bichromate-gum printing has more followers, I believe; naturally, as it is surer, and, due to the great latitude found in multiple-printing, the printer has opportunities for self-expression. If photography, as commonly shown, lacks soul, these processes appear to give the studious worker opportunities to impress his personality upon the work. One must, however, have a working-knowledge of drawing to succeed. The rest will depend on those intangible things which are usually born in one and are seldom acquired, though they may be enhanced by study and practice. Bromoils may have variations of the standard colors, which is an advantage. As gums are really watercolors, one will readily understand what a multiplicity of shades and colors may be used. With the exception of bromoils, all my prints are waxed, first for preservation and next to help the general appearance. If a print becomes scratched, it may be rewaxed. A waxed print does not easily soil—due to the nature of the ingredients used. As I dislike the yellowness of commercial floor-wax, I have had put up for me a wax which is

almost colorless. It is composed of paraffine, beeswax and turpentine.

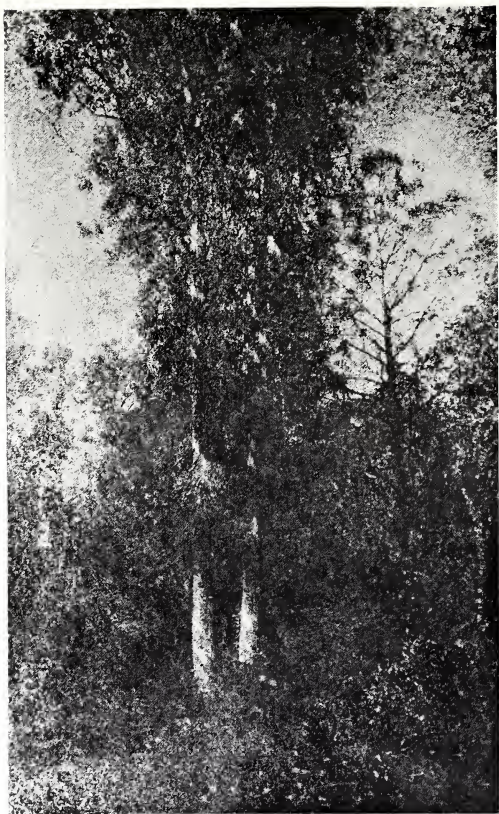
Now that my story is ending, I will temper it by relating an incident which will show that life in the Southland is not a perpetual song and that exasperating happenings may occur. As all Florida drinking-water is warm in its natural state, and as most of us get a thirst if we walk long enough, the desire for a drink of something cold grows into a matter of importance. We intend to have an orange or two ready when the call comes, but one can overlook taking them. When a dozen of us, after a long walk in the treeless open and under a burning sun, returned to a little village, very thirsty, we found a general store containing a refrigerator well stocked with bottles of quenchers which looked uncommonly attractive. As we were about to call out an order the clerk got ahead of us by shouting, "That stuff's hot; no ice for two days!" Life grows hard at times, even in Florida.

Pictorial Composition

PERHAPS the most reasonable of all the laws of composition is the oldest of them—the law of special prominence, which requires the predominance of one or more leading objects at the expense of all the other objects in the picture. As I have already intimated, the superior importance of one object in a group aids the eye to find the center of interest. The principal object draws the sight through the subordination of the other objects, just as some bright star in the heavens attracts attention through the dimness of its surrounding constellations. In the old Egyptian paintings, this law of special prominence was enforced by giving exaggerated dimensions to the chief figure, because the Egyptians did not know the resources of high light and high color. The battlepieces upon the walls of the palaces, where the king in his chariot is shown to be several times the size of his enemies or his own soldiers, are examples of it.

JOHN C. VAN DYKE.





EUCALYPTUS
THOMAS S. CARPENTER



Selling Your Photographs

FREDERICK C. DAVIS

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What "to Photograph



If you wish immediate wealth you have only to locate several oil-pockets and dig into them. Similarly, if you aspire to success at marketing photographs you have only to discover the needs of editors and to satisfy them. But although there are not many more available oil-pockets, there are many editors and innumerable editorial needs.

It would be as absurd for me to attempt to state precisely what you should photograph as it would be for me to make a pencil-dot on a map and to say: "There's an oil-pocket; go dig into it." The one way to discover the needs of editors and how to satisfy them is to develop a "nose for news."

A "nose for news" is simply the ability to determine the value of any certain photograph to any certain editor. The several ways of acquiring that very necessary ability are: (a) by experience, which consumes the most time and is the most difficult; (b) by examining the nature of photographs already sold to publications and printed in them, which is less difficult and just as effective; and (c) by careful study of prevailing editorial needs and market-demands, which is the best method of all.

To succeed, mix thoroughly liberal quantities of (a), (b) and (c).

Not many, other than the large metropolitan newspapers, employ staff-photographers; and if a smaller one does, the photographer is usually a reporter who has much scribbling to do besides. When most newspapers require a photograph of something local, the city-editor telephones to a commercial-photographer and tells him to "get it." Thereupon, the commercial-photographer packs up his forty-pound outfit, goes out and "gets it."

However, a good many subjects are not of sufficient interest to cause the city-editor to dispatch a commercial-photographer to obtain them; but, if photographs of those same subjects were brought unsolicited to him he would at once see their value and buy them. That is the biggest advantage of the free-lance photographer with the newspapers.

If the press-photographer wishes to follow these tactics he may profit, even in a very large city; for staff-photographers go where city-

editors tell them to go, and city-editors have much to think about.

The kinds of subjects bought by newspapers from free-lance photographers are those of local interest, brought to the office while the interest in them is still keen. A large number of such subjects are available daily. The news-photographer may glean his tips from a morning-newspaper and sell his prints to an evening-journal. When he becomes sufficiently well known, he may be called upon and dispatched after a photograph just as the commercial-photographer. But first he must impress the editorial mind by giving it, unasked, the very sort of thing it wants.

The free-lance photographer should see possibilities in many subjects:

A public building burns.

A corner-stone is laid.

An illicit still is found.

A new building is erected.

A murder occurs.

A new fire-department truck is bought.

The governor comes to town.

Josh Jones finds a hen's egg three-times normal size.

A park is improved.

The first baseball-game is played.

The robber of the postoffice is caught.

I. Wright, the local author's new book, is published.

The local inventor again invents.

Any one of these suggestions holds possibilities for photographs useful to a newspaper; and many more events are just as promising.

The types of photographs used by postcard-makers are known to almost every one. The subjects run from famous buildings and historical monuments to artistic human-interest pictures such as a small kitten sleeping with its feet entangled in a maze of thread with which it has been playing.

At that point, merge the demands of the calendar-makers. They use the human-interest type, and run to landscapes, seascapes, and portraits of pretty girls. Usually the demand of both postcard- and calendar-makers is that the picture tell a story. If it can be used without an explanatory caption, all the better. For an

example of a picture-told story, glance at almost any cover of the *Saturday Evening Post* and note how the whole situation is made clear without one word of explanation. It is that kind of photograph that postcard- and calendar-makers want. If you will glance over the postcard- and calendar-illustrations you have at hand you will readily see the types of photograph used.

Sometimes book-publishers send out calls for special kinds of photographs they need in preparing certain books. In that case, they usually advertise in an appropriate magazine and mention the kind of photograph they wish; for example, historical prints if a history is in preparation. The unlimited variety of books published calls for an unlimited variety of photographs. Certain publisher-photo-services make it their business to supply publishers with the photographs they wish; but that is not hurtful to the prospects of the free-lance, for the photo-services must obtain photographs of every kind from every source, and must be stocked with a larger number and variety of prints than any one magazine or publisher could possibly use. Thus, in fact, the news-photographer has an increased market.

The largest field for the free-lance photographer I have left until last; that is, the magazines. There are so many magazines and such a variety of them that almost any print, if it is of interest at all, should find a place with one of them. Besides the large magazines there are many smaller ones; those devoted to almost any conceivable vocation, and others to almost any interest or hobby. Besides the publications issued for the great mass of the reading public, there are magazines published solely for advertisers, architects, real-estate agents, automobilists, bakers, confectioners, cement-users, drug-stores, dry-goods merchants, electricians, engineers, miners, bankers, financiers, fraternal members, furniture-dealers, millers, grocers, hardware-sellers, historians, hotel-owners, owners of restaurants, jewelers, labor-union members, lawyers, insurance-agents, soldiers, sailors, municipal workers, printers, publishers, railroad men, magicians, fox-raisers, blacksmiths, fruit-growers, undertakers, stamp-collectors, and scores of others, not to speak of almost two thousand house-organs issued by manufacturers as sales-promotion literature or for the benefit of their employees. And each of these uses photographs occasionally, if not regularly. The photographer need not deplore a lack of sufficient markets for his photographs.

The greatest influence toward the development of a "nose for news" is the giving to it of several whiffs of news. A photographer may "shoot"—

a professional photographer never photographs—he shoots—he may shoot and shoot, and have his every photograph returned to him as useless for publication—but not if he first discovers what to photograph and what not to photograph. As a means toward that end I have selected, at random, issues of three magazines whose pictorial sections contain prints which are, broadly, just the sort of photographs the photographer in a medium-size town produces. The magazines are *Popular Science*, *Illustrated World*, and *Popular Mechanics*; despite their names, these magazines print photographs of a very general scope—more general than one would suppose. I have selected only photographs with short captions, or those with explanatory articles not more than two hundred or so words in length.

In *Popular Science* I find:

An Apartment-House for Plants.
A Hospital on Wheels.
Potato-Gathering Made Easy.
This Rudder Makes the Boat Behave.
New Light for the Photographer.
He Wears a Showcase.
A Rubber Heel with a Noise.
Milking Cows by Electricity.
Anchoring Bricks to the Side of a House.
Sketching on Fungus, One Artist's Hobby.
Sampling the Soil.
Making House-Wrecking Easy.
A Machine that Harvests Crimson Clover Seed.
Wheel-Guards that Save Life.
Working Safely on High Voltage Lines.
A Lake that has a Crust of Salt.
Punching Your Votes.
Your Money is Safe in this Bank-Tank.

In *Illustrated World*:

Motorized Wheel-Chair for Invalids.
Whirr of Motors Replaces Song of Cotton-Pickers.
How Aristocrats of Dogdom Travel.
Perform Marriage-Ceremony in Oil-Filling Station.
Rail Motor-Trucks for Short-Line Road's Use.
No More Backaches from the Lawn-Mower.
Novel Arrangement of Air-Hose for Work-Benches.
Largest Milk-Tank in the World.
Comfortable Footrest for a Rustic Seat.
Dog Hurt in Auto Accident Wears Wooden Leg.
Street-Cars Adopt "Pay-As-You-Leave" System.
Dentists' Scales for Weighing Mercury.
Toy Makes Spelling Easy for Kiddies.



THE VILLAGE-BLACKSMITH

HERBERT B. TURNER

Small Check-Book in Silver-Case.
 Nine-Story Building Collapses.
 Traveling Mail-Box on Intercurban Car.
 Clever Method of Advertising Perfume.
 Makes Suit Out of Stamps.
 Wellesley Girls Have a "Sneezing Closet."
 Raising Chickens on a Back Porch.

In *Popular Mechanics*:

Owner of Artificial Hands is Proud of Dexterity.
 Imperishable Burial Robes Shown on Living Models.
 Novelty Window-Sign Spells Words with Snowflakes.
 Imposing New Bridge at Jacksonville.
 Street-Sign Calls for Help if Robbers Invade Store.
 New Style Log-Cabin Built Like Stockade.
 Vines Completely Cover Office-Building.
 Beautiful Ice Stalagmites are Pranks of Jack Frost.
 Unique Wood-Sculptures are Work of a Decade.

Electric Warehouse-Truck Performs Heavy Tasks.

Hydraulic Jack Tears Up Street-Car Tracks.
 Man-Power Onion-Planter Sets an Acre a Day.

Grotesque Images Reward Motor-Cycle Race Winners.

Weak Derrick Starts Wreck of Steel-Building.

Concrete Logging Piers are Used in Lumber-Industry.

World's Largest Clock Keeps Accurate Time.

Grotesque Face on Auto Advertises Carnival.

River-Bed Proves to be a Rich Coal-Mine.

Outlets of Odd Shapes Made for Irrigation.

Unusual Park-Playground Built in Circus-Form.

Giant Vase, Lawn-Ornament, is Made of Concrete.

Old Silo in Railroad-Yard Houses Little Store.



MODESTY ASSAILED

KENNETH D. SMITH

Street Rises so Abruptly Four Flights of Steps are Necessary.

Church Uses Bill-Board to "Sell" Scriptures.

This wide variety of subjects cannot but serve to show that even in very small towns there are many opportunities for salable pictures. More than that, there are markets for prints of:

Statues	Farm-scenes
Blacksmith-shops	Mural decorations
Farm light-plants	Seascapes
Sheep	Gardening operations
Landscapes	Interior decorations
Paintings	Designs
Girls' heads	Camping-scenes
Farm-buildings	Trapped wild animals
New inventions	Freaks
New achievements	Cattle
Live game	Orchards
Birds in flight	Time-saving plans
Industrial arts	Social progress
Fields of grain	Fashions
Desert-views	Wharves
Domestic animals	Paint-departments
Poultry	Mills
Harbors	New banks
Garage-methods	Large estates
Railroading	Factory-equipment
Concrete-construction	Show-window displays
Flowers	Store-fronts
Electrical appliances	Motorcycles
Live-stock prize-winners	Economic interest
Art-museums	Good and bad roads

Motorboats
Musical work
Shoe-factories
Prize-dogs
Yachts

Spraying-methods
Counter-displays
Blasting
Landscape-gardening
Sports

If you live in a large city you have the additional opportunities to obtain photographs such as are published in the *Mid-Week Pictorial* and the *Illustrated Review*, and also in some of the large national magazines and in the rotogravure-sections of the leading Sunday newspapers. Although the large city offers more opportunities for photographs of celebrities and such, there is much competition. The photographer in an average-size city may not have frequent opportunities for photographs of renowned persons; but he has many other chances for salable photographs, which even up things. Sometimes, a notable person does "come to town"; but I would no more presume to tell you here to "camp on his trail" than I would dare to remark to a duck-hunter: "Pardon me, old man, but you'd better pull your trigger. There's a bird right where you've pointed your gun."

(To be continued)



A thing of beauty is a joy forever.
Beauty is truth, truth beauty.

JOHN KEATS (1821, 1921).

My First Photograph

EMILY H. HAYDEN

Number Six

MY first venture into photography was a very ambitious one—a nude, and a baby at that! What more difficult subject could have been chosen? However, a picture was a picture, anything that could be snapped, a suitable subject to one who did not know a printing-frame from a plateholder.

was filled to the top with what looked like an order from a chemist's shop. What could it be? A Christmas-gift composed of pans and chemicals seemed a strange one, and I began to think that I didn't care much about that box. As the family waited expectantly, I unpacked pans, bottles, powders, scales, queer-looking frames, paper in sealed packages—in fact, everything



MY FIRST PHOTOGRAPH

EMILY H. HAYDEN

It was on Christmas-day, twenty-six years ago, that I had my first camera in my hand—an old-fashioned fixed-focus box. That was the year my baby celebrated her first Christmas, hence a memorable one in the Hayden annals. After the tree had been admired—for, of course, we had one—and after the gifts had been distributed, my husband brought forth a wooden box and, without comment, laid it at my feet. It was a large box and suggested groceries. It

that, afterwards, appeared to be generally necessary for developing photographic plates. Not until I reached the bottom of the box and found a leather-covered case, did it dawn on me that I was the possessor of a camera-outfit.

I tried to "look pleasant," but my heart sank when I thought of all those articles about which I knew nothing, not even their names. Last of all, there appeared a "Book of Instructions for Beginners"—a very clear, concise little book;

but it sounded like Greek to one who didn't know a proof from a printing-frame. All day, we pored over that book, trying to identify the various articles named. When night came, my husband and I, with the assistance of a red blanket, turned the bath-room into a darkroom and filled one 4 x 5 platholder, after much discussion as to which side of the plate should be face up. The next day was fair, also Sunday, so my husband rendered first aid in that all-absorbing task—making the first picture.

We did not have to decide what to select for a subject, as there was only one under discussion—the baby. She was so cunning that we must have a record of some of her little tricks. She was so lovely in the bath, that we decided to photograph her nude; but where and how? Not in the bath-tub, that was too deep, there would be no way to get "at" the picture. After again, and again, consulting the little book, moving the furniture and turning on furnace drafts, we put the china wash-basin (fortunately) on the floor in the path of sunlight coming through the window. As the book said, we must have the source of light behind us, and, as there wasn't much room, the baby was put as far away from the window as possible.

How much exposure to give, was the next question before the house. T—1 sec.— $\frac{1}{2}$ sec.— $\frac{1}{25}$; which? I suppose, from the "aetion" in the resulting print that we must have decided to set the shutter at $\frac{1}{25}$. We had no trouble with focusing, for the camera, as I said, was a rectangular box with a fixed-focus lens, of name unknown to us.

We named the picture before making it—as all artists should—"Washee Neck"; that was what the baby said just before I made the exposure. It was hard to wait until night to do the developing; but the darkroom was anything but dark in the daylight. Carefully following directions, we weighed, measured and mixed developer and hypo, and then impatiently waited for night to fall.

There is a thrill which comes to every true worker under the red light which time does not lessen. The uncertainty as to what may develop makes it ever an exciting experience. Who does not remember the first time the thrill that was his?

* * * * *

After the baby was asleep, we stole quietly into our improvised laboratory, put the plate into the developer and then rocked, and rocked, and rocked the tray. As the plate was under-exposed and the day was cold, it was some time before the first highlights showed up—a black spot here and there; another and another, where

the sunlight had touched the baby. Should we leave it longer in the developer or take it out? What to do—we were afraid to touch it; afraid not to touch it. It was a tragic moment. Finally, when everything had turned black and we thought it was ruined—and we couldn't make it worse—we put it into the hypo, and, again, rocked and rocked the tray.

Next morning, when the first proof came out of the printing-frame, for the admiration of the family, I felt that joy which can be felt only by the creator of the beautiful.

With that little 4 x 5 print, my career as a photographer began.

[Since that happy Christmas-day, when her husband gave her a "little black box," Mrs. Hayden has developed into an ardent and successful amateur-photographer. The print of her first photographic venture, "Washee Neck," was accompanied by a recent portrait of that same little model. It is shown herewith. The mother—like the other women-participants in this series of photographic reminiscences, "My First Photograph"—sensibly declares that she is not afraid to reveal her age, and that she has used a camera for over a quarter of a century. Nor is she backward in permitting the world to see how she failed utterly to produce a masterpiece at the very beginning. Yet there is a certain charm about this very first portrait she made of her baby-girl. Indeed, all the initial attempts in photography, that accompany these ingenuous confessions, have an interest that is sympathetically engaging. They teach a lesson in enthusiasm, of confidence, soon followed by success and satisfaction.

Although Mrs. Hayden began her photographic activity by means of a genre, and preferred to express her artistic proclivities in that form, she strayed occasionally into other fields—nature-studies and decorative design, where she has produced some charming things which are included in the list of contributions to PHOTO-ERA given below. She has exhibited with eminent success in the London Salon, International Salon and those of Philadelphia, Los Angeles and Pittsburgh; also at the Montreal Camera Club, the Photographic Guild of Baltimore, and held an exclusive show at the Maryland Photo-Club, Baltimore. At the annual amateur photographic contest of the *Youth's Companion*, held in Boston, 1904, Mrs. Hayden captured the one-hundred dollar prize, a fifteen dollar prize from *The Camera* and a similar one from the New England Telephone Company. Cash prizes of ten dollars each were awarded her in competitions held by PHOTO-ERA MAGAZINE, *The Camera*, *The American Photographic Times*, and the old



THE BABY LATER ON
EMILY H. HAYDEN

Burr McIntosh Monthly. Mrs. Hayden has furnished delightfully artistic cover-designs for PHOTO-ERA and *Rural New Yorker*, and received a liberal cash-prize from *Country-Life in America* for a study of grapes.

Among the pictorial contributions made by Mrs. Hayden to the pages of PHOTO-ERA MAGAZINE are the following: 1906—September, "Sermon-Time"; 1908—"November-Afternoon" (Honorable Mention in Outdoor Genres), "He's Coming" (third prize in Indoor Genres, in PHOTO-ERA Annual Competition), "Moths and Blossoms" (second prize in Decorative Photog-

raphy); 1909—December, front-cover "Christmas-Morning"; 1914—April, "Afternoon-Tea" (first prize in "Home-Scenes", appears on opposite page) and, September, front-cover (little girl among Queen Anne's Lace); 1915—September, "Summer" (third prize in Landscape with figures); 1916—June, "Billie" (little boy seated among his toys); 1918—June, "Snow-Bound" (third prize in "Spirit of Winter"); 1919—March, "Dieky Bird" (second prize in Indoor Genres) and, August, "The Morning-Paper", genre, from the Photo-Guild of Baltimore, Md.—EDITOR.]

Illustrated Advertising and the Present Business-Situation

[We adapt from our Berlin cotemporary, *Photographische Industrie*, the following pertinent remarks about advertising, which photographic manufacturers, dealers and workers may read to advantage.—EDITOR.]



ADVERTISING is always a means to an end; and, in whatever form it finds expression, it is necessary. He who wants nothing uses nothing. He who has nothing to offer or to look for, really needs no advertising—he even can do without newspapers.

But who is in this fortunate situation? All our lives are, in consequence of social relations and an already far advanced and still more necessary division of labor in the future, in a state of seeking and needing things from hour to hour. We all have our needs—a thousand requirements; but we also have our habits. One of these is, for millions of persons, the reading of the papers, looking over the advertisements and noting their information as a preparation for contemplated purchases. That is true for the mass of consumers and not less so for the business-man himself. For instance, would our big manufacturers otherwise have been able to bring out this or that article, that to-day is in everybody's mouth, so to speak, when the conversation leads to it, as is now the case? Would they have so constantly, in bad times as well as in good, placed advertisements in the newspapers of the cities and country-towns that penetrate into the uttermost corners of the land? Would it not have been squandering—an extraordinary waste—if all their previous advertising had been useless? But the course of things, so far, has shown the falsity of the indifferent and un-

founded views often expressed about the superfluity of advertising, especially in times of slack business. To insure its success all that is necessary is that it be done intelligently and that it be kept in mind that only those things gain general acceptance that bespeak the skill of their producers. This alone will give results. If an advertisement is based on this principle its success will follow unfailingly. In times of dull business, that success will naturally be less ample; but it will prepare for the coming time of increased desire to buy. Without incitement, however, the demand dwindles as well as the interest of individuals and of the crowd. That is an oft-proved experience in every business-activity.

The first requisite of intelligent advertising is the selection of appropriate mediums and then to see that the printed announcement shall be in such attractive form as to excite and attract the attention of the reader and offer him some new ideas. The advertiser should realise that generally, in the case of large city-newspapers, the reader has only time to glance over the pages, and that an advertisement to catch his eye must have a distinct form, preferably a picture, that will impart at a glance the information it is desired to convey, either by witty headings, by skilful arrangement of the text, tasty ornaments and such aids as will captivate the interest on the instant.

A good advertisement will be one that will not at first be recognised as such. The less the public to be won becomes aware that it is being influenced by an advertisement, the quicker it is captured by the desired "suggestion." In such a case, the illustration should not be the whole thing, but still the text is only a secondary



AFTERNOON-TEA
EMILY H. HAYDEN

WILLIAM J. WILSON

A TOUCH OF WINTER



matter, explaining concisely what is offered. The illustration must be in harmony with the text and with it form an indivisible whole, suggesting thought and not befuddling its object. We can realise correctly the psychological process that takes place on seeing a well-designed illustrated advertisement; even before we read the text we try instantly to explain to ourselves the design. If our explanation agrees with the text, our quickly aroused interest becomes permanent, which is the surest proof of the value of the advertisement. At the same time, we learn from this that a picture-advertisement should make no great demand upon the thinking-power of the reader. There are many kinds of intellects, and a simple and unartificial word-

ing insures its comprehension at once. The best picture-advertisement is the humorous one. Even a touch of the coarsely comic often does not hurt, since our realistically inclined times are not unresponsive to such.

It is further to be remembered that a too frequent change of the text of an advertisement almost always lessens its effectiveness. On the other hand, the announcement of a given article or firm should not be repeated so long that it becomes tiresome. People who know women say that their charm lies in their changeability, which always keeps the mind of man in movement. A changing advertisement shares the attracting-power of a beautiful, interesting woman. It exercises this power on all readers.

Desensitising Autochrome Plates Before Development

A. and L. LUMIÈRE and A. SEYEWETZ



N account of their great chromatic sensitiveness, it has heretofore only been possible to handle Autochrome plates in a very feebly-lighted dark-room.

Notwithstanding the use of the Virida lighting, which we have recommended, it has been necessary to take the further precaution, to avoid fog, to limit the action of the rays coming from the lantern to the time absolutely necessary to determine the moment at which the contours of the image can be perceived. This determination, indispensable for fixing the total duration of development, presented a certain degree of difficulty on account of the feebleness of the light.

One can understand, then, the great interest presented by a process which, by destroying the chromatic sensitiveness of the plates just before developing, without changing in any way the latent image, would permit following readily the action of the developer by light from a relatively intense source.

This desensitising, which only affects the silver haloid salt that has not been modified by the light and respects integrally the impression resulting from the exposure of the plate in the camera, was realised for the first time by Lüppo Cramer by means of phenosafranin.

The verification of the singular action of this substance has led us to undertake the general study of the problem of desensitising and to investigate the chemical groupings susceptible of characterising this curious property.

After having tried, with this object, a considerable number of substances,—coloring materials, mineral and organic products of the most diverse kinds,—we have not been able to connect the desensitising property with the presence in the molecule of determinate functional groupings; we have indeed found some compounds capable of fulfilling the required conditions; but without discovering among them any other chemical relations capable of grouping them or to foresee any new substances applicable to desensitising.

Among the active bodies, *Aurantia* (an ammoniacal salt) in solution of 1/1000, and *picric acid* in solution of 1/100, have appeared to us as the most interesting.

With *Aurantia* the desensitising is comparable to that obtained by means of phenosafranin; and, at the same time, it does not present the latter's drawbacks.

The coloring of the gelatine-coating by the solution of phenosafranin resists washing much longer than that given by *Aurantia*, which is eliminated quite rapidly from the plates. Besides, the phenosafranin not only retards quite perceptibly the appearance of the image and development; but for the same time of exposure the retardation is not constant. In the case of *Aurantia*, on the contrary, these operations take place practically in a normal and regular manner.

The desensitising action of *picric acid* is distinctly inferior to that of the preceding substances, especially for red and green rays; but it is, nevertheless, sufficient to permit its use under lighting-conditions indicated further on.



OBLIVIOUS

J. H. FIELD

Comparative tests of these three desensitisers have been made upon the following basis: the method of development founded on the duration of the appearance of the image was applied, using the metoquinone developer; operating on plates of uniform preparation exposed under identical conditions, but for variable lengths of time, which were to one another as the figures $1/3$, $1/2$, 1, 2, 4, 6, etc., the time of exposure necessary to obtain a normal picture being taken as a unit. Each plate so exposed was at once cut in two parts, one of which was developed under the usual conditions and the other was immersed for thirty seconds in the desensitising-bath. The development of the desensitised plate was prolonged to obtain a result as identical as possible to that which received the regular treatment.

To determine the duration of the appearance of the image the following developer was used:

Water.....	1,000 parts
Metoquinone or chloranol.....	15 parts
Sodium sulphite (anhydrous).....	100 parts
Potassium bromide.....	6 parts
Ammonia, 22° Bé.....	32 parts

Five parts of this was diluted in 80 parts of water.

When the desensitisers were used, as soon as the plates were immersed in the diluted developer a lighted candle or a Pigeon lamp was placed at a distance of fifty centimeters from the tray, or even with a sixteen-candle incandescant lamp in a lantern protected by six sheets of Virida paper at a distance of one meter.



SAFETY FIRST

FANNIE T. CASSIDY

After counting the number of seconds from the introduction of the plate in the developer until the appearance of the first contours of the image, 15 cubic centimeters of the concentrated developer were added and the development was continued without stopping the counting; but turn-

ing the operator's back to the source of light when not necessary to examine the plate to watch the progress of development. The times required to obtain pictures as nearly as possible like those regularly developed, are shown in the following table:

RELATION BETWEEN DURATION OF EXPOSURE AND NORMAL EXPOSURE

	Without sensitiser		With sensitiser	
	Duration appearance of image	Duration of de- velopment	Duration appearance of image	Duration of de- velopment
	s.	m.s.	s.	m.s.
6 to 8 times normal.....	13	1.15	17	1.30
4 times normal.....	16	1.45	19	2.00
2 times normal.....	19	2.15	21	2.30
Normal.....	25	3.00	24	3.00
$\frac{1}{2}$ normal.....	29	3.30	33	3.30
$\frac{1}{3}$ normal.....	36	4.36	40	4.30

Development with Desensitiser

	Pieric acid		Safranin	
	Duration appearance of image	Duration of de- velopment	Duration appearance of image	Duration of de- velopment
	s.	m.s.	s.	m.s.
6 to 8 times normal.....	20	1.45	23	1.55
4 times normal.....	22	1.55	26	3.00
2 times normal.....	35	3.10	40	4.10
Normal.....	39	3.55	47	5.00
$\frac{1}{2}$ normal.....	42	4.10	50	5.30
$\frac{1}{3}$ normal.....	48	5.00	60	6.40

The figures given for safranin are average; the result varying from one plate to another, although conditions of handling were identical.

An examination of the table as well as of the preceding considerations shows clearly the advantage of Aurantia, which appears to us should be used for Autochrome plates in preference to any other desensitiser.

With certain predisposed persons, a concentrated solution of Aurantia in acetone some-

times causes redness and irritation of the skin which may go as far as burning. It is prudent, therefore, to handle the solution with precaution and eliminate the Aurantia at once by washing in acetone or alcohol in case it comes in accidental contact with the fingers. The manufacturers now reduce this difficulty by delivering it in more diluted solutions in alcohol which are much less caustic.

Bulletin de Photographie.



Amateur-Opposition

THE ever-increasing practice of photography by amateur camera-users is, in some parts at least, having a marked effect on studio-business. The time was when "amateur-opposition" would have been taken to mean the backyard operations of quarter-plate enthusiasts who fancied themselves as spare-time professionals, and mention of it would have gained but little attention. It would never have been considered as a menace to business. Today the situation is different.

The latest slump in portraiture synchronised with the coal-strike, and was thought to be a natural result of the strike and its subsequent bad trade; but while professional portraiture slumped, amateur photography was on the increase; and this, combined with certain other facts, makes it appear quite reasonable that the snapshot was as much responsible for the professionals' bad time as the coal-strike.

That the above assertion is not readily acceptable I know. For years the average professional has been in the habit of pooh-poohing the photography of amateurs. It has been beneath his notice, and therefore quite out of the question as possible opposition. But the dimensions to which "amateur photo-finishing" and "developing and printing" have grown have convinced many that snapshotting is not such an insignificant thing after all; and thus it comes about that studio after studio has taken up amateur photo-finishing as a side line, and some have gone further and made it their main line, with portraiture a poor second.

Now for some facts on which I base the assumption that amateurs' activities are worth consideration. A studio in a mining-district recently took up amateur photo-finishing, and towards the end of the strike the portrait-busi-

ness was practically *non est*. The side line, however, was going so well that there was no fear at all of having to close down or reduce the staff. Which tends to show that the trade-slump did not prevent those most affected from spending money on photography, and also that amateur-work is replacing professional.

In the course of a year I see many thousands, or probably millions, of snapshots. By far the greater number are atrocious; some bad; some good; a few really fine, and an odd one in a thousand retouched; from which it will probably be assumed that they are not to be compared with professional work. But they all mean money, and are undeniably popular.

Of course, much of the large amount of snapping has momentary value only. The prints do not advertise any one or bring re-orders. But this does not apply to the good work on which the amount of money spent with many a dealer would be acceptable as total income in a small studio.

And amateur-work does not stop at portraits. That some amount of outdoor-work which might otherwise fall to professionals is done by amateurs can be readily understood; but on this count I do not think it is generally realised what an enormous number of wedding-groups are snapped instead of being made by professionals. And beyond this, the amateur has penetrated even into the holy of holies of commercial photography. I have seen and handled vest-pocket negatives of interiors, home and architectural, machinery and furniture. Not in any quantity; but in each case meaning money. I have even been asked to block out such negatives and get professional results, and firms who have allowed such photographs to be made, instead of sending for a professional, seem to be totally ignorant that it is unreasonable to expect such results.



MARCH-FLOODS

KENNETH D. SMITH

If professionals are not going to "feel the draught" they must take measures to protect and popularise professional work. Professional and amateur photography differ, and it is this difference that gives us clues to the situation. Professional portraiture is conventional; amateur portraiture is real. The former may have suited our Victorian ancestors and is essential to theatrical artists; but the latter has the stronger hold on the masses of to-day. Studio-portraits, natural in comparison with the plant-pot studies of the past, need even more naturalising and it is quite possible that gardens would pay better than glass-houses for modern studios. The ancient fetish of retouching needs proselytising. Panchromatic or non-filter emulsions with careful lighting, exposure and development, will not only minimise retouching, but give as natural and more pleasing results than the average "snappist" ever gets.

The "snappist" and the amateur proper should be cultivated instead of being scared away or belittled. When they can go to a professional for advice, they don't then proceed to

attempt the impossible with furniture and machinery. The commercial specialist, if he is short of work, should advertise not only that he is a commercial specialist, but that his work cannot be very well done by any one else.

Last, but most important, are truth and quality. It may be a matter of opinion whether these things are known and appreciated by mankind in general; but it is a fact that they will tell in the end, and the deliberate operations of a true artist can be neither excelled nor equaled in any eyes by haphazard snapshotting.

Professional work of truth and quality is not likely to interfere with or be interfered with by the quite legitimate practice of amateur-photography or professional amateur photo-finishing, and our first-class professionals should be the last to experience what I have termed "feeling the draught." But, perhaps, I ought to point out that by quality-work I do not mean merely chin-cutting and waist-shaving. Such and more wonderful things can be done with the film-negatives of "folding-pocket" tyros.

THEMIT, in *The British Journal*.



THE CHAPEL-ENTRANCE
ALEXANDER MURRAY





EDITORIAL



Civic Photographic Publicity

THE suggestion made on this page, recently, that camera-clubs make it a part of their season's program to establish a permanent exhibition of their respective city's salient points of interest, scenic, architectural and historic, is bearing fruit. Several clubs have signified their intention to take the matter up at once. One well-known club is going to assemble prints of subjects that have already been adequately interpreted by its members, and add to this nucleus the remaining subjects as soon as they shall have been made in a suitably artistic manner, in the hope to have the collection completed by next spring. In response to the hint thrown out by PHOTO-ERA, several years ago, the Municipal Art League, of Chicago, included among its commendable activities in the interests of local industrial art and the fine arts the issue of a series of postcards, that depict artistically the principal points of architectural and scenic interest of the City of Chicago. The League displayed admirable judgment by consulting the leading camera-club of Chicago. The subjects selected for reproduction, by photogravure, are mostly prize-winners in a print-competition conducted by the Chicago Camera Club. The series, which consists of twenty-four postcards, pictures among others the following subjects: LIONESS—LINCOLN PARK ZOO, Gordon C. Abbott; THE FIELD MUSEUM, and the sculptured group, FOUNTAIN OF THE LAKES, A. H. Brown; THE LAKE SHORE DRIVE, C. N. Bowen; THE PERISTYLE (by moonlight), Robert H. Conklin; ON THE CHICAGO RIVER, Leroy Goble; LILY POND—WASHINGTON PARK, and THE PALACE OF FINE ARTS—JACKSON PARK, E. E. Gray; THE WRIGLEY TOWER, Harry C. Keane; ABRAHAM LINCOLN—LINCOLN PARK, O. G. Lundberg; VISTA—TOWER BUILDING, E. L. MacMillan; THE ART INSTITUTE, L. B. Mayo; MOUTH OF THE RIVER, Charles Miller; WASHINGTON SQUARE, J. B. Morris; IDA NOYES HALL—UNIVERSITY OF CHICAGO, and HARPER MEMORIAL—UNIVERSITY OF CHICAGO, John J. Ryan; DES PLAINES RIVER (in winter), R. W. Trowbridge; THE BRIDGE—GARFIELD PARK, W. F. Weinecke, and ADAMS STREET—FROM THE ART INSTITUTE, Paul Wierum. Much credit is due to the Chicago

Camera Club for its public spirit, and its co-operation with the Municipal Art League in so exemplary an enterprise, which, as a means of publicity, is at once artistic and effective. The beneficiaries are the City of Chicago, the Municipal Art League, the Chicago Camera Club, and the visitors to the great city.

The Editor is indebted to Paul Wierum, of the Chicago Camera Club, for a complete set of these beautiful picture-postcards, twenty-four in number, which are for sale in the large hotels, book-stores and department-stores, at the low price of five cents each, or fifty cents the dozen. The first edition of 65,000 was so favorably received, that a second edition has been recently issued. Visitors to Chicago will be sure to find something better in these views of the city, as they are a distinct departure from the conventional, commercial postcard. They also prove the superiority of an impression in artistic monochrome to a sharply defined reproduction, plain or colored. Moreover, these new postcards of Chicago's show-places suggest copies of oil-paintings rather than direct contact-prints. They are reproductions, direct or indirect, of prints the original negatives of which appear to have been made with soft-focus lenses.

It will be interesting to observe which camera-club in some other large American city will take the initiative in a similar movement. As for the only active and enterprising camera-club in the Hub, it should not find it difficult to arouse the necessary interest among its members, many of whom already possess valuable negatives of picturesque Boston—typical views of the city's delightful scenery and public buildings. Many of these views have embellished the pages of this magazine during the past twelve years, and would look well, executed in photogravure, as part of a series of postcards similar to the ones already described. We would suggest, therefore, an exhibition to be held under the auspices of the B. Y. M. C. U. Camera Club, of photographs of Greater Boston, open to amateurs and professionals alike. The result should be a revelation of the wealth of available material—not only with respect to its artistic value, but to its historic interest. Such a collection should yield a series of postcards second to none in the country in artistic beauty and educational value.



ADVANCED COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value \$10.00.

Second Prize: Value \$5.00.

Third Prize: Value \$2.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Prizes may be chosen by the winner, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, of artistic design, suitably engraved.



Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. *No more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Remember that subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.* Prints on rough or linen-finish surface and sepias are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. All prints should be mounted on stiff boards.

3. *Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data.*

4. *Each print entered must bear the maker's name and address, the title of the picture and name and month of competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for a 2-cent stamp. Be sure to state on the back of every print exactly for what competition it is intended.*

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, this does not prevent the photographer from disposing of other prints from such negatives after he shall have received official recognition.

6. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins; but in every case, prints should be protected by strong, stiff boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

7. Competitors who have won three first prizes within a twelve-month, become ineligible for two years thereafter. The too frequent capture of the first prize by one and the same competitor tends to discourage other participants and to make the competitions appear one-sided and monotonous.

Awards—Outdoor Genres Closed September 30, 1921

First Prize: J. Kirkland Hodges.

Second Prize: J. H. Field.

Third Prize: H. B. Rudolph.

Honorable Mention: W. T. Adderly, Lewis Beuthel, John C. Bird, Henry Boak, J. E. Carson, Martha Curry, Maude Lee Eldridge, Harry B. Fisher, Allen Frazer, G. W. French, Jared Gardner, Frederick Genscher, George W. Gould, Charles T. Graves, Edgar L. Kline, O. H. Kohler, Salome E. Marchwardt, F. W. G. Moebus, Hannah G. Myrick, George S. Nalle, Neil Wayne Northey, Edwin A. Roberts, U. M. Schmidt, Mason H. Seabury, William D. Sell, Edgar S. Smith, Edwards H. Smith, Kenneth D. Smith, John Smith, W. Stelcig, C. Ulrich, J. Szn, Rosella M. Weller, Elliott Hughes Wendell, Belle M. Whitson, Leopold Zwarg.

Subjects for Competition—1921 and 1922

"Winter-Sports." Closes January 31.

"Home-Portraits." Closes February 23.

"Copying Works of Art." Closes March 31.
(Paintings and Statuary.)

"Home-Scenes" (Interior). Closes April 30.

"Street-Scenes." Closes May 31.

"Summer-Sports." Closes June 30.

"Summer-Flowers." Closes July 31.

"Marines." Closes August 31.

"Outdoor-Genres." Closes September 30.

"Architectural Subjects." Closes October 31.

"Domestic Pets." Closes November 30.

"Indoor-Genres." Closes December 31.



Photo-Era Prize-Cup

In deference to the wishes of prize-winners, the Publisher will give them the choice of photographic supplies to the full amount of the First Prize (\$10.00), or a solid silver cup, of artistic and original design, suitably inscribed, as shown in the accompanying illustration.

Competitors Must Mind the Rules

COMPETITORS, in the Advanced Workers' and Beginners' Competitions, are inclined to ignore some of the rules, one of which is that the name and address of sender, also name, month and kind of competition must be written plainly on the back of each print.



CLEARING THE LAND

J. KIRKLAND HODGES

FIRST PRIZE—OUTDOOR-GENRES

Illuminants in Enlarging

Most writers upon the subject of projected images have assumed that the optical system of the lantern is practically perfect and that the source of light approaches the theoretical point. This is far from the case in practice, and consequently it is generally necessary to overlook theory and to make the best of the condensers, lenses and lights as they are usually found. The production of an optically perfect condensor of, let us say, $8\frac{1}{2}$ inches in diameter would be such a costly process that few people could afford to purchase it, and consequently it becomes necessary to make the best of such as can be procured at a reasonable price. Fortunately the fact that rather larger sources of light than the electric arc are available makes the task rather simpler than it would otherwise be. The electric arc, *The British Journal* goes on to say, which from its small area would appear to be an ideal illuminant for enlarging, is, perhaps, the most difficult to handle in practice, the chief difficulty being the erratic burning of the arcs in most automatic lamps. In these the carbons are necessarily in line, and the slightest variation in the composition of these causes the arc to shift in a most annoying manner. It has been found in actual practice that the effective exposure may be halved or doubled, as the case may be, when making two exposures from the same negative in quick succession; this being due to the fact that at one time the arc is burning on the side nearest the condensers, but a few moments later it has veered round to the farther side or vice versa. The only arc free of this objection is that obtained by placing the carbons at right angles; but as this can be obtained only with a hand feed it is not so convenient for enlarging where there are more distractions than in

lantern-slide projection. The lamps used in kinematograph projectors are steady in burning by reason of the shortness of the arc and the large size of the carbons; but these, too, need constant attention, and may be dismissed as unsuitable for photographic work.

It is therefore necessary to fall back upon less powerful sources of illumination, such as the incandescent electric light, acetylene, and incandescent gas. Good work has been done with ordinary petroleum-lamps in the past; but few of these are now in use. The incandescent electric lamp, and particularly the gas-filled or half-watt type, is probably the best form of illuminant where electric current is available. The most suitable form of lamp is one in which the metallic filament is compressed within a small area, such lamps being made for motor-car lights that are usually for low voltages only and cannot be used upon circuits of 100 to 240 volts. It is hoped that they will shortly be obtainable for higher voltages. The ordinary small half-watt lamps, in spite of their widely-spread filaments, are, however, quite suitable if the point of light idea is discarded and a finely-ground glass-diffuser placed as near the bulb as is possible. This diffuser should be no larger than is necessary to cover the filament, as by reducing the area the risk of fracture by uneven heating is minimised. A frosted globe would be even more convenient; but as clear globes are more easily obtained, the independent diffuser is, upon the whole, to be preferred. The object of the diffuser is, of course, to prevent the projection of a more or less sharply-defined image of the filament upon the focusing-board. It has been a common practice to interpose a ground-glass screen between the light and condensor, or even to place it between the lenses of the condensor, but the nearer it is to the light the less loss of illumination.

The incandescent gas-mantle is next in merit to the



BURNING TRASH

J. H. FIELD

electric light, and will be found amply sufficient for all but the greatest magnifications. Here, again, the groundglass-diffuser is necessary to prevent the texture of the mantle from showing. The inverted form is preferable to the upright; but the latter will answer well if a diaphragm with a diameter of about $1\frac{1}{4}$ inches is placed close up, so as to cut out the upper and lower portions. This greatly improves the definition.

Acetylene is a satisfactory illuminant and, as a rule, can be used without a diffuser. The darkroom should, however, be well ventilated, as the fumes are apt to cause headache and nausea in a confined space.

The effect upon the functioning of the lens-diaphragm which results from variation of the size of the illuminant must not be overlooked. If a very small source of light, such as an arc that burns carbons less than a quarter of an inch in diameter, be used, the lens may be stopped down to quite a small aperture without there being an appreciable difference between this and the full opening of the lens; but if a diffuser be interposed, the effect of reduction of aperture is at once perceptible. The conditions are the same if a large unscreened light, such as the incandescent mantle or an acetylene or oil-flame, be used.

In some modern enlargers a rising-and-falling front, similar to that of a camera, has been fitted, the idea being to facilitate adjusting the image upon the screen. This is totally wrong in principle, as the centers of the light, condensor and lens should always be in a straight line. If the light be out of position, an improvement in illumination may be obtained by moving the front; but the proper course is to adjust the light and leave the optical system undisturbed.

Enlargements of very fine quality may be obtained without using a condensor, but at the expense of much longer exposures. Three methods are generally employed, the most effective being the illumination of the negative by a gridiron pattern of mercury-vapor lamp placed behind a sheet of groundglass. Another is the use of a large faceted reflector having an ordinary metallic filament lamp in the center, a diffusing screen being interposed between this and the negative. The third and most usual in this country is the use of a powerfully-illuminated white screen, which reflects light from screened lamps through the negative. The exposures by this system were usually too long for commercial use; but the introduction of the half-watt lamp has made a great difference in this respect.



A SLIM CHANCE

H. B. RUDOLPH

Carrying-Cases

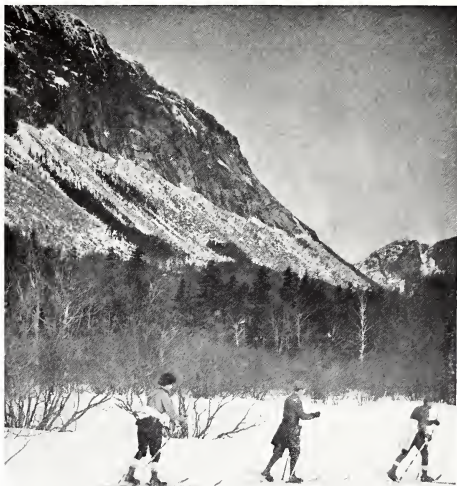
MANY photographers pay far too little attention to the carrying-case, especially when we come to consider the amount of wear the average camera is subjected to, be its user amateur or professional. We were reminded of this only the other day when we saw a photographer using one of the high-grade pocket-cameras, which he carried in a limp canvas-case that was obviously not proof against dust or hard usage. Speaking of the term pocket-camera, *The British Journal* goes on to say, it may be pointed out that the pocket is one of the least suitable places for the carrying of a good camera, unless it be one of the ultra small instruments so constructed to be entirely dustproof, a difficult proposition; and even then a well-made leather-case would be required if the good appearance of the instrument is to be preserved. Some time ago we were shown a nearly new pocket plate-camera that had traveled some hundreds of miles in its owner's pocket—its condition had to be seen to be believed. Experience teaches us that though a well-made leather case is an expensive item, and is listed by camera-manufacturers as an extra, it should be regarded as essential, particularly if the camera is a small and valuable one, like many of the pocket-instruments in use to day. The older-fashioned type of view-camera is capable of standing a great amount of rough usage without showing any ill effects, but the modern small camera cannot be put in the same category as its more solidly-built predecessor.

Mounting Prints

ALTHOUGH the effectiveness of a photograph can be very greatly increased if it is mounted neatly and with taste, an untidy or unsuitable mount is even worse than no mount at all, says a British cotemporary. Many photographers appear to find it very difficult to get a print stuck down on card in such a way that it lies perfectly flat, and there is no sign of mountant oozing out at the edges. So long as mountants that contain water are used, the difficulty of mounting a print so that it will keep flat must inevitably exist; and it is, therefore, amazing that more photographers do not adopt the very simple plan of attaching the print by its two top corners only. Provided it is to be kept flat, in a portfolio or otherwise, a print mounted in this way looks quite as well as if it had been stuck down all over; and, at the same time, it looks very much better than most of such stuck-down prints can ever do. When the print is dry, it should be made as flat as possible by drawing it once or twice round the edge of a ruler, or similar object with a sharp right angle along it. It is a good plan to give it more treatment than is sufficient to flatten it, so as to leave it with a very decided curl, with the face convex. In this condition it may be shut up in a book or put under pressure for a few days, and will then come out flat and ready for trimming and mounting. The slightest touch on the two top corners with a suitable adhesive will be all that is necessary.



SUBJECT FOR NEXT COMPETITION ADVANCED WORKERS



SKI-ING IN FRANCONIA NOTCH

KENNETH D. SMITH

EXAMPLE OF INTERPRETATION

Advanced Competition—Winter-Sports Closes January 31, 1922

IN the October issue, page 209, I wrote a little editorial, "Who is Responsible?" My purpose in writing it was to combat the erroneous assertion that the winter-season was synonymous with photographic hibernation. There is no reason whatever why photography should not be an all-the-year-around business or pastime. If the camerist is physically unable to make pictures, there are plenty of opportunities indoors for the man who is eager to get the most out of photography.

However, here, I wish to place emphasis on the outdoor opportunities; and, among these, none can surpass the exciting, invigorating and thoroughly enjoyable pictorial studies of winter-sports. In an early issue, we expect to publish an article by Carine and Will

Cadby, our London correspondents, which will show convincingly the tremendous popularity of winter-sports in Switzerland. In the United States and Canada, there is an ever-increasing evidence of the growth of winter-sports in popular interest and appeal. In New England particularly, the Boston Chamber of Commerce, local Boards of Trade and State legislatures are working together, as never before, to popularise winter-sports so that they may be enjoyed throughout the New England states. In line with this splendid program, PHOTO-ERA MAGAZINE wishes to do all that it may to popularise winter-photography, and this includes making pictures of winter-sports.

Readers of PHOTO-ERA MAGAZINE will recall the many excellent examples that Kenneth D. Smith has contributed within the last few years; and, by looking up these pictures in their files, camerists who have real, red blood in their veins will respond to the appeal

of the clear, cold air, the sparkling snow and the excitement of the sport. After all, photography in winter is somewhat akin to the bather who dreads the first plunge into water that he *thinks* cold but, subsequently, discovers to be "fine." The increasing interest in winter-photography bears out my statement that it has a fascination of its own, that it compares in no way to picture-making at other times of the year. Obviously, warm clothing is a requisite and careful attention to the photographic equipment; but, then, these two requirements are not insurmountable; and whatever annoyance or discomfort arises will soon be forgotten in the exhilaration and excitement of winter-sport photography.

With all due respect to the painstaking worker who believes in using a tripod, plate-camera and other equipment suited to thorough workmanship, I am free to admit that in the photography of winter-sports the portable, roll-film hand-camera is the most effective outfit. Unless the worker has actually tried it, he does not know how difficult, annoying and, sometimes, positively disastrous it is to manipulate plateholders and slides when the thermometer is at or below zero. At such times, a tripod is just one more vexation; for with ice and snow on the ground, it is no easy matter to plant the tripod-legs firmly enough to permit the camera to be supported safely. Even with a roll-film hand-camera there are enough problems to be mastered. For example, in cold weather the film should be turned slowly and steadily to avoid generating small electric sparks which may cause weird markings on the film and might be powerful enough to ruin it. Then, too, take care of the lens! Those who wear eyeglasses know what happens when they enter a warm room after being out in the cold air. Their eyeglasses "steam up"; and, until the moisture evaporates, the glasses are useless. The very same thing happens in the case of the camera-lens; and, unless careful attention is given the matter, the sensitive surfaces of the component parts of the lens may become seriously damaged. It should be remembered that the marvelous polish given high-grade anastigmat lenses makes them particularly subject to injury by sudden changes of temperature and the action of rain, snow or spray. Hence, in returning from a winter photographic expedition, do not bring the cold camera into the warm room, but put it first in some part of the house—the entryway, cold closet, vestibule or shed—so that it may "thaw out" slowly and the lens be freed of condensed moisture.

Within the last few years the compact, convenient vest-pocket cameras have been used largely by successful camerists. The advantage of these cameras is that they may be carried in the pocket, and thus the photographer may keep his hands in his coat-pockets instead of exposing them to the cold, as would be the case if the camera had to be carried in the hand. However, there are certain occasions when the reflecting type of roll-film camera is best, and then the worker will do well to wear heavy, woolen gloves or mittens. Even in zero-weather, the glove or mitten may be removed from the hand long enough to set the shutter and adjust the diaphragm, without causing any physical discomfort. Those readers who have gone into the mountains in winter will agree that the exercise of tramping through snow, climbing up mountain-sides, chopping wood for the fire and other activities arouses the sluggish blood in their veins and produces a healthy circulation that invigorates and makes them relish the frosty air.

The matter of exposure in winter is a vexing problem to many photographers. The subject becomes of even

greater importance when making speed-pictures of winter-sports. Unfortunately for the camerist, the human eye is not always to be depended upon to gauge the actinic value of light. Although the light upon the snow may be blinding to the eye, it does not follow that a short exposure will give a correctly exposed picture. For years, the Editors of PHOTO-ERA MAGAZINE have striven to impress photographers with the fact that *there are no intense blacks in nature*. The soot-and-whitewash prints of winter-scenes are failures, because, in most cases, the makers have failed to give sufficient exposure and thus the shadows have been under-exposed and the highlights have been lacking in detail. Hence, in making pictures of winter-sports, to be sure give ample exposure even though the light to the eye may be dazzling. There are several excellent exposure-meters available to the camerist, and he will do well to obtain one.

There must be the beautifully graded snow that is not "whitewash," the shadows that are not "soot" and the natural action of the figures. Among winter-sports may be mentioned tobogganing, skating, snowshoeing, ski-ing, hockey, racing by men, women or horses, ice-boating, curling, fishing through the ice and certain forms of hunting. The accurate portrayal, technically and artistically, of any of these sports will receive the careful attention of the jury. We hope to receive pictures that breathe the spirit of the great out-of-doors in winter and that show the human element engaged in the enjoyment of the exciting and health-giving sports that are popular at that season of the year. This is the second competition of the kind that we have had in several years and, judging from the number of requests that we have received to repeat such a competition, we are confident that our readers will enjoy it thoroughly.

In searching for suitable material, it should not be assumed that the camerist must go far afield. Virtually in or near every large city or town is a pond or lake—sometimes an artificial one—upon which many winter-sports may be played during the winter. I remember that, while I lived in New York City, I spent many a pleasant afternoon in Central Park watching men and women play the old-fashioned game of curling. Also, at the same place, I have watched many exciting games of hockey. Perhaps the most interesting of all were the Saturday afternoons and Sundays when thousands enjoyed the skating.

No matter where the reader may live, if he will portray truthfully any sport that reflects the season of the year and the winter-pastimes in his part of the world, his picture is assured of a hearty welcome from the jury. We hope to receive many original subjects, for the readers of PHOTO-ERA MAGAZINE comprise an ever-growing family of men and women whose one aim is to enjoy photography throughout the year and who realise that insofar as they make better pictures, to the same extent will their pleasure and profit increase. Throughout the year 1921, the keen interest shown by amateur and professional photographers in these competitions has been a source of deep satisfaction to the Editors. Now let us all work together to make 1922 even more satisfying and profitable to all lovers of good photography.

The more winter-sport pictures are made and exhibited, the quicker will the public be made to appreciate the advantages and pleasures of winter-photography. In fact, the camera may become the means to bring renewed health and happiness to thousands in our cities who have never known of the healing and invigorating power of the great out-of-doors in winter.

A. H. B.



BEGINNERS' COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value, \$2.50.

Second Prize: Value, \$1.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Subject for each contest is "*Miscellaneous*"; but original themes are preferred.

Prizes, chosen by the winner, will be awarded in photographic materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

Rules

1. This competition is open only to beginners of not more than **two** years' practical camera-activity, and whose work submitted here, is **without any practical help from friend or professional expert**. A signed statement to this effect should accompany the data.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints from $2\frac{1}{4} \times 3\frac{1}{2}$ to and including $3\frac{1}{4} \times 5\frac{1}{2}$ inches, and enlargements up to and including 8×10 inches.

4. Prints representing **no more than two different subjects**, for any one competition, and printed in any medium except blue-print, may be entered. They should be simply and tastefully mounted. **Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.** Prints on rough or linen-finish surface paper and sepias are not suitable for reproduction, and should be accompanied by smooth prints that have the same gradations and detail.

5. **Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data. Criticism at request.**

6. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, he may dispose of other prints from such negatives after he shall have received official recognition.

7. **Each print entered must bear the maker's name, address, instructions, the title of the picture and the name and month of the competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type, and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for 2-cent stamp. Be sure to state on the back of every print for what contest it is intended.**

8. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins, but in every case, prints should be protected by strong, **stiff** boards, or of a kind that sends slightly without breaking. Large packages may be sent by express (prepaid).

Awards—Beginners' Competition Closed September 30, 1921

First Prize: W. H. Pote.

Second Prize: None awarded.

Honorable Mention: Melvin C. Parrish, Frank W. Snyder, B. M. Stern, C. H. True.

High Ideals and the Beginner

A LETTER came to my desk a few days ago in which one of our subscriber-friends made a few remarks something to this effect: "PHOTO-ERA MAGAZINE is a source of encouragement and inspiration to me and I value it highly for that very reason. Other photographic publications are interesting and valuable; but in your magazine I find something different—something that makes me wish to go out and do big things. However, here I must say that I think, sometimes, you expect too much from beginners. Why not let us in easy without giving us such high ideals that they seem to be entirely out of reach?"

Our friend meant well, and I appreciate his kind words with regard to the magazine; but let me say emphatically that to let the "beginner in easy" would not help him in the end. There is and can be no compromise.

We should not approve a university that let in its students easily and then was compelled to drop them because of poor scholarship. If we should accept mediocre pictures in our competitions and publish poor examples of pictorial photography merely to make it easy for amateur or professional photographers to get into print, we would be betraying the very confidence that these men and women place in us. Moreover, it is no compliment to them to award a prize or publish a picture that they would soon learn, from other sources, to be poor. It is far better to have high standards and never attain them than to have none at all. High standards give the impetus to the effort of attainment. If the prize may be won easily, who cares to strive for it?

No lover of sport enjoys a one-sided game of baseball or football. Our enthusiasm and effort are aroused to a high pitch when the game may be won or lost by an eyelash. Even in cards or checkers, if you know that your opponent will not test your mettle and that you have won the game before you begin, there cannot be much pleasure in victory. However, if your opponent is known to be a good card- or checker-player and you will have to do your very best to win, then you become aroused, alert and eager to meet the test. Amateur or professional photography is an intense and absorbing game. There is every opportunity to meet focien worthy of your steel and, to be able to meet them at all, you must have high ideals and strive for them faithfully. That ideals have their important place in the affairs of men is no more convincingly shown than at the Disarmament Conference at Washington. Whether it succeeds or fails, an ideal started it.

Our friends hint, in a sense, that if our ideals are too high, many beginners will drop discouraged by the wayside. Does a great university close its doors because some of its students are not graduates? Does a



ABOVE THE EVERGREENS

W. H. POTE

FIRST PRIZE—BEGINNERS' COMPETITION

merchant close up his store because certain of his employees fail to make good? The university and the merchant have certain standards. Those who meet them are ready for the next upward step; those who do not are dropped behind. Instead of high ideals in photography being a detriment, they are a positive incentive to those who are sincerely ambitious and willing to work hard. Those who "cannot see it" drop out automatically. We are again face to face with the age-long truth of the survival of the fittest. True, it may appear to be pitiless; but after all it is what has brought about the upward evolution of man and his undertakings.

Then, again, our correspondent might lead us into the rut of letting well enough alone. Were such a policy put into force in the art and science of photography, it would bring photography to a standstill. As I have said a number of times, there is no standing still in photography, no more than there is in any other human activity. We cannot let well enough alone without falling behind or eventually bringing about a collapse of the very thing that we have striven so hard to build up.

After all, there is but one right way to do a thing. We know what happens when a builder uses cheap lumber, poor plumbing and inferior workmen. To be sure, he builds a house and some family may live in it for a time; but soon one thing, then another, gives way; the house becomes untenable and eventually the property is of no value to the builder or tenant. Let us suppose that good lumber, first-class plumbing and efficient workmen are used to build the house. How much better is the result. The property is of value and is a source of revenue for many years. So it is with photography. Figuratively speaking, unless the beginner builds his photographic house with high ideals and the best available equipment, and produces the best possible results, his photographic house will begin to give way until it collapses and becomes a dead loss of time, money and effort.

Perhaps, the reader may say to himself, "All this sounds very well; but how can this idealism become of any value in such a practical matter as making pictures?" Let me reply that high idealism and true vision are the root and branch of the success of nations and individuals. The greatest achievements of man may be traced directly to a high ideal and then the practical working out of that ideal. Somewhere or somehow, there must first be the incentive or desire to do big things that are worthwhile; then, comes the task to make the ideal come true. It has been done and is being done with success to-day in every walk of life.

The beginner in photography, if he is sincerely eager to get the most out of it, needs the right sort of a start. If he is led at the outset to respect and value high standards, he will find that his work is more quickly accepted and appreciated. The beginner who seeks to "get by" may enjoy a temporary success; but the public will soon find that his work does not "wear well" and that it lacks true feeling and thorough workmanship. Again, the reader may venture the question, "Why all this terribly serious discussion when I have no intention to make salon pictures?" Very well, if the beginner aims no higher than to make ordinary snapshots and lacks the ambition to do something worthwhile with his photographic gifts, whatever they may be, then, he is no better than the man who *might* have been a famous musician *if* he had only practiced.

High ideals and honest effort are the surest way to photographic success. There can be no compromise with anything short of the very best. True, we may fail often; but that is no disgrace when our standards are high and we take each failure as so many stepping-stones to ultimate success. The beginner who sticks to high ideals throughout his photographic career will have reason to be proud of the splendid record he is sure to make.

A. H. B.

Water for Photographic Purposes

RECENT weather-conditions have turned attention more strongly than usual to the subject of our water-supplies; and many photographers must have asked themselves whether they were justified to draw on the domestic sources for their hobby. In the large towns there is usually no choice—it has to be “tap-water” or nothing—but many of us have an alternative supply, not used in the ordinary way, perhaps, because of doubts as to its purity; and we may be wondering whether it cannot at least provide what we want for photography.

As a rule, far too much stress is laid upon the necessity for pure water. The writer has photographed in many parts of the world, and has used water which he would be very sorry to have to drink; but has never

is required for this purpose that one is seldom likely to be driven to do so. But if it should happen, all the solids are removed by passing the water through a folded handkerchief, or, better still, through a tuft of cotton pushed into the neck of a funnel. When this has been done, there is only one other impurity that is in the least likely to be harmful, and that is air.

For photographic solutions, dissolved air—which is essential in all good drinking water—is the one “impurity” which is likely to cause trouble. Fortunately, it is easy to get rid of it. All that has to be done is to boil the water briskly for a minute or two, and then let it go cold quietly without too much agitation. It is best always to do this with water used to make up stock-solutions of developers, and whenever it is convenient it is well to do it with the water with which the developer is diluted. Not that any omission to



YOUNG HOLLAND

C. ULRICH, J. SZN

HONORABLE MENTION—OUTDOOR-GENRES

had a failure which could be attributed to impurity derived from that source. One should not deliberately use bad water when good is available and can be spared; that stands to reason. But those matters which make a supply unsuitable for human consumption do not have any injurious effect on the ordinary photographic operations.

Let us take, for example, mechanical impurities, such as soil, sand, leaves, and insects, which are unavoidable in water collected from roofs. These are all quite inert, and do not interfere in the least with the use of the water for washing negatives and prints. They are easily removed from a small quantity of it, such as would be used for diluting developer or making up a fixing-bath; and, if they were not, no great harm would be done. Such solids cannot make their way into the gelatine-film; and the only precaution that need be taken with them is to give the photograph a gentle rub with a piece of cotton and a rinse in cleaner water, so as to get rid of any dirt that may be clinging to its surface, before putting it up to dry.

To make up stock-solutions, it may be considered that it is better not to use such water; and so very little

do so will spoil the result; but because water containing much dissolved air—or rather oxygen, for that is the active agent—causes the solution to oxidise quickly, and so may give rise to a general staining, which is unpleasant on the hands, undesirable in negatives, and in the case of prints, at any rate, may make an acid fixing-bath or an increased quantity of sulphite in the developer necessary.

It will be seen from this that we have a much wider field from which to draw for our water for photography than a good many people seem to realise. Even sea-water can be used for washing both negatives and prints; but in this case the last two or three changes must be fresh water, or the sea-salts will crystallise in the film or on the surface and spoil it. Distilled water, which is sometimes laid down in formulae, is totally unnecessary in any of the ordinary operations likely to be undertaken by the average amateur; nothing at all is gained by its use, and the operation of distilling may itself cause the water to be highly impure, with the one undesirable impurity from the photographic standpoint—air.

H. W. T., in *The Amateur Photographer*.



THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



Developing Plates in Florida

WE were pleased to receive a very interesting letter from a subscriber, Mr. J. N. Scott, Buena Vista, Florida. Among other things he says, "Many difficulties are met with in doing photographic work here, owing to the extreme heat. The water-pipes run a few inches under the soil, and, therefore, become extremely warm. Portrait films will not stand over five minutes' washing, ordinarily; even when strong solutions of formaldehyde are used, there is trouble. The air is very damp, at times; and, despite the extreme heat, the plates and films dry slowly and frequently pit to a considerable extent. I make use of the Imperial Pyro-Metol formula, increasing the metol to 50 grains and using no bromide, with double the amount of water called for in the original formula. This gives a rapid developer and beautiful detail is obtained. You might try it some time."

Simultaneous Developing and Fixing

THE new formulas with chloranol and metaquinone which we have indicated for simultaneous developing and fixing, in the line of those published by Otsuki and Sudzuki, have been the object of numerous practical tests which have confirmed the results that we have announced. Since our publication a new formula with diamidophenol and acetone has been indicated by M. Bunel (*Bulletin de la Société française de Photographie*, p. 198).

This formula leads to results very close to those that have been obtained with chloranol and metaquinone; nevertheless, the pictures are a little less contrasty and have a more marked tendency to present dichroic fog. Besides, the developer does not keep well and cannot be used one hour after preparing it.

The fixing-developers with chloranol and metaquinone keep much longer and can be used several days after their preparation. The time the solutions will keep is considerably increased if they are kept in well-filled and tightly-corked bottles.

We have made up an unchangeable fixing-developer in two solutions as follows:

SOLUTION A

Water.....	400 parts
Chloranol.....	6 "
Sodium sulphite (anhydrous)....	32 "

SOLUTION B

Water.....	600 parts
Tribasic phosphate of soda.....	100 "
Hypo-sulphite of soda.....	40 "

For use on a plate $3\frac{1}{4}$ by $4\frac{1}{4}$ or similar surface take of:

Solution A.....	6 drams
Solution B.....	8 "

Contrary to what has been published by various writers, overexposure for negatives for simultaneous fixing and developing is necessary only for certain emulsions; but for a large number among them the time of exposure does not differ from what is required

for separate developing and fixing. The divergences observed are due probably to the nature of the emulsions employed. We have tested on this point the different emulsions of Lumière and Jougla plates and have found that the following only require notable overexposure to obtain good negatives: *Lumière*: Sigma, Violet Label, Ortho S. A. Jougla: Mauve Label, Intensive.

The other emulsions may be developed and fixed simultaneously without modifying the normal time of exposure necessary for ordinary development. It will be better, therefore, to use the fixing-developer with the emulsions mentioned only in case of considerably overexposed plates, which will then give negatives free of the defects of overexposure.

A. and L. LUMIÈRE and A. SEYEWETZ.

Animated Cartoons and Sketchographs

A CORRESPONDENT asks us to explain how animated cartoons and sketchographs are made.

To make a single subject of about five hundred feet of animated cartoons requires hundreds of separate drawings, made by a force of artists and assistants working steadily for days—sometimes weeks. These drawings are photographed, one at a time, in the order called for by the action.

One foot of motion-picture films consists of sixteen frames or pictures. The film is projected onto the screen at the rate of one foot per second. The picture-fan sees in a very few minutes what it has often taken weeks to photograph.

The chief difference, we are told, between the process of photographing animated cartoons and making a regular photoplay is that in the photoplay the pictures are made at the same rate at which they are later projected—sixteen a second—whereas in the cartoons they are made one picture at a time.

The apparatus for photographing animated cartoons consists of a table on which the drawings are placed in position to be photographed. A regulation motion-picture camera is suspended above the field where the drawings are placed, the lens pointing downward to the table.

An attachment is made with the camera so that a picture is made each time a lever is pulled. "Animators" change the positions of the drawings as required between the exposures. The drawings have all been made in advance, and adjustments of the head, arms, legs, body, etc., for the successive movements is all that is required. Unfailing patience is the chief requisite for this work.

The process of making sketchographs differs from that of filming animated cartoons chiefly in that the sketchographs are not completed in advance and then photographed, but are actually drawn under the camera and photographed as they are being made.

[Elsewhere in this issue will be found a review of "The Kinema Handbook" by Austin C. Lescaurboura. This new book furnishes authentic practical and up-to-the-minute facts with regard to motion-pictures and their application to modern business and social life.—EDITOR.]



OUR CONTRIBUTING CRITICS



A DEAR, LITTLE, DUTCH BOY ELIZABETH B. WOTKYN'S
YOUR CRITICISM IS INVITED

Whoever sends the best criticism (not over 150 words) before the last day of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

THE picture is odd and has a certain appeal, but the number of perpendicular lines tend to make the setting too masculine for the feminine subjects, and without the figures,—who by the way are evidently very much interested in the making of the picture,—the picture becomes purely an architectural study with poor lines and distortion, due to the camera being tilted slightly upward instead of using the rising-front. The eye tends to follow the white portion of the picture from the figures upward to the detail at the extreme top of the picture. The dark spot in the upper right corner might be due to the lens not covering the entire plate, but it looks more as if it could be a portion of timber projecting from the portico. The foliage in the lower portion breaks the foreground effectively; but I would rub down the light flowers slightly to make them less

conspicuous. Trimming half an inch from the top and left side would help some.

ALSON WHEELER.

ARTISTICALLY, at least, I should say to trim off the picture at the top just below the projecting logs; then trim off all of the dark shadows in the opening at the left right up to the front edge of the jamb. This will leave a picture of excellent composition. Commercially, however, it may be that the public is attracted by the architectural details at the top of the picture, in which case I would trim only a trifle over $\frac{3}{8}$ of an inch from the top, and on the left as before. The señoritas are so alluring, and the pose so natural, that I believe the picture would sell equally well without the extra architectural details. The length of exposure is not given, but it was sufficient to give excellent tonal rendering. We trust that Mr. Herrick has explored the possibilities of the picture in a sepia bromide enlargement.

WINN W. DAVIDSON.



THE PICTURE CRITICISED THIS MONTH

THE picture is rather novel and, notwithstanding glaring faults, is not without attractiveness. The señoritas, doubtless, are the "big feature," with their beaming, comely faces and characteristic costume.

More's the pity for their being trapped in a place of such somber and forbidding shadow. Contrasts of light and shade are so pronounced as to destroy all semblance of balance or harmony. The heavy blackness all around forces crushing masses of white to the fore, unrelieved by semitone; the absence of any appreciable gradation renders harsh, unpleasant lines between white and dark.

White bulk of column is *exactly in the center*, and requires intent examination to identify. Mass of white wall at top should be eliminated. A small print of some interest would result if everything to left of center of column were eliminated, and about $1\frac{1}{2}$ inches were cut off top and $\frac{1}{8}$ inch from bottom, and circular patch above figures, to the right, were removed.

LYNDESEY BOURKE.

This picture is a very artistic and pleasing one, and the fair señoritas give it a romantic atmosphere of Mexico, but there are a few minor faults which, if overcome, would improve the picture.

I do not think these fair damsels receive as much attention as they should, for the round, wooden beams at the top draw our admiring gaze away from them, as if to prevent us from looking on the damsels too long. Therefore, I would trim about one and one-half inches

from the top, and think the result would be a more restful picture. The dark space at the right is objectionable, because we are not exactly sure by what mysterious means the jug or flower-pot rests so peacefully in the air; so it would be much more reassuring if we could see that it was hanging. Of course, I see that Mr. Herrick has ingeniously put the young ladies in the picture, probably to act as a relief from the plain lines of the corner; for if they were not there, the picture would appear too monotonous. Nevertheless, they produce the faults just mentioned.

WARWICK B. MILLER.

I FEEL that any wrongness or rightness, where this month's picture is concerned, must be with the observer, rather than with the picture; for only one who is as familiar with Patio-scenes as we are with our own outdoor scenes can fully appreciate the exotic atmosphere of the composition. At first, I could not understand the background, at all; and even after much study, I do not feel prepared to say whether or not the picture is an unusual one.

However, there can be no doubt as to the good balance of tone, on the whole; the monotony of the darker walls being happily relieved by the further grayish wall at the left, and the lantern—if lantern it is—at the right. And, certainly, there can be no two opinions as to the grace and pleasing attractiveness of the figures, the one in dark raiment so well offset by the

(Continued on page 318)



OUR ILLUSTRATIONS

WILFRED A. FRENCH



WITH approach of winter the people of the North—those in easy circumstances and fond of traveling—will turn their thoughts to the grateful, soothing climate of Florida. Indeed, the popularity of the Gulf State, as a winter-resort, has given an impetus to her activities and industries that has caused little-known cities to spring into prominence. Thus such cities as Miami, Haynes City, St. Petersburg, Tampa, have acquired considerable commercial importance, so that the well-known tourist-resorts of Jacksonville, St. Augustine and Ormond no longer monopolise the traveler's almost exclusive attention.

But Florida's attractions, besides its salubrious climate, are fittingly presented by Thomas S. Carpenter, and emphasised by a series of photographic impressions, text and pictures forming the initial feature of this, our Christmas number. If Mr. Carpenter's plea to the uninformed in behalf of Florida's manifold claims to popularity is irresistible, his camera-pictures are more so. Mr. Carpenter has always manifested a passion for photography, as a pastime, giving expression to his innate artistic feeling by means of prints produced in the usual, conventional way. Satisfactory—indeed, admirable as they were, they did not seem adequately to express his sincere love of the beautiful or to represent the artistic truth, or even a fair equivalent, of what he considered a real picture—a work of art. Like one of the faithful, he turned his steps towards Mecca—the shrine of Clarence H. White. In the winter, it was Mr. White's school in New York City; in summer, it was Nature, Everywhere. There he found opportunity for expansion, for true expression—encouragement, inspiration. A truer appreciation of the possibilities of pictorial photography, and an early application of its principles, assisted by the use of the newer types of lenses and flexible and artistic printing-processes, enabled Mr. Carpenter to produce results that were extremely gratifying. This was several years ago. Since then, and profiting by his (Mr. White's) instruction, he has pursued his own course, expressing his artistic individuality with sincerity, breadth and vigor—qualities that are reflected in the pictorial impressions that grace the fore part of this issue. Each of these ten interpretations reveals a true sense of beauty, taste and skill in composition and a mastery of technical resources.

Data: "A Florida Welcome"—frontispiece; April, 4.30 p.m.; good light; $2\frac{1}{4} \times 3\frac{1}{4}$ Ansco; 4-inch B. & L. Tessar; stop, F/4.5; 1/25 second; film; Eastman Powders; print, Gum Bichromate. "Ponce de Leon Hotel"—page 274; February, afternoon; good light; 5 x 7 Premo camera; 9-inch R.R.; stop, F/11; 1/5 second; plate; pyro; print, Gum Bichromate. "Open-Air Chess"—page 275; March, 10 a.m.; strong light; $2\frac{1}{4} \times 3\frac{1}{4}$ Ansco; 4-inch B. & L. Tessar; stop, F/4.5; 1/25 second; film; Eastman Powders; print, Willis & Clements Platinotype. "Village Street-Scene"—page 276; March, 10.30 a.m.; bright light; $1\frac{1}{8} \times 2\frac{1}{8}$ Ansco; 4-inch Tessar; at F/6.3; 1/25 second; film; Eastman Powders; print, Gum Bichromate. "Sponge-Float-Tarpon Springs"—page 277; March, 3 p.m.; fair light; $1\frac{1}{4} \times 1\frac{1}{8}$ assembled camera; 2-inch B. & L. Tessar; stop, F/4; 1/50 second; film; Eastman Powders; print,

Artatone. "In San Sui" ("Place Beautiful")—page 279 and front-cover; April, 9 a.m.; light, filtering through; $2\frac{1}{4} \times 3\frac{1}{4}$ Ansco; 4-inch B. & L. Tessar; stop, F/4.5; 1/10 second; film; Eastman Powders; Palladio print. "The Palamedes"—page 280; rare species of butterfly; camera, lens and stop same as preceding; May, 9 a.m.; good light; 1/25 second; film; Eastman Powders; print, Gum Bichromate. "A Florida Pastoral"—page 283; April, 10.30 a.m.; good light; $1\frac{1}{4} \times 1\frac{1}{8}$ (assembled camera); 2-inch B. & L. Tessar; stop, F/3.3; 1/25 second (excessive); film; Eastman Powders; print, Gum Bichromate. "A Jungle-Scene"—page 284; April, 9 a.m.; light filtering in; $2\frac{1}{4} \times 3\frac{1}{4}$ Ansco; 4-inch B. & L. Tessar; stop, F/4.5; 1/10 second; film; Eastman Powders; print, Gum Bichromate. "Eucalyptus"—page 286; April, 11 a.m.; good light; $2\frac{1}{4} \times 3\frac{1}{4}$ Ansco; B. & L. Zeiss Tessar; stop, F/6.3; 1/25 second; film; Eastman Powders; print, Gum Bichromate.

On his famous "Pilgrimage to Wolfboro"—described and illustrated in the August and September issues of this year—Herbert B. Turner sped with his companion, Ralph W. Osborne, like a demon along the route from Boston to Lake Winnepesaukee. Why he was not stopped and incarcerated for overspeeding is a mystery that may never be revealed. In some places, the roads were so bad, that he and his "auto" were overcome by exhaustion, and both were obliged to rest. During one of these pauses, Mr. Turner availed himself of the services of the only mechanic in the locality—the village-blacksmith. This gave our resourceful camerist a rare opportunity to test his artistic skill. The result proved to be extremely felicitous, page 289. The flame, the soul of the shop, dominates all else; at the same time, almost, we detect the human element, and then the eye takes in the numerous accessories of the craft—anvil, tongs, cooling-trough, horse-shoes, etc. "Yes," remarked Mr. Turner dolefully, afterwards, "I wanted to take that big shovel out of the way; but I didn't think of it until I examined the developed negative, a week later!" All the same, it's the best indoor-genre of the kind I have ever seen; and I have seen a lot of them, these thirty years.

Data: made not far from Lowell, Mass.; June 18, 1921; 11.30 a.m.; very dark interior; P. & S. Doublet; 12-inch focus; stop, F/8; 15 seconds; Standard Ortho-nor; pyro; Print on Azo F; 5 x 7 Cycle Graphic.

The amusing, little still-life caprice, "Modesty Assailed," by Kenneth D. Smith, page 290, awarded Honorable Mention in the last March competition, is very much alive. Things of this sort are novel and interesting, and relieve the threatened monotony in an attractive branch of indoor-photography.

Data: $3\frac{1}{4} \times 5\frac{1}{8}$ Pocket Premo C; 7-inch Velostigmat, series I; stop, F/8; with electric lights; Wellington Anti-Screen, Backed; pyro; enl. on Enlarging Cyko Plat.

Mrs. Emily H. Hayden's revelations of the story of her first photograph will be found exceedingly interesting. With exceptional courage she permits the publication of her first experiment with the camera, which, fortunately, needs only a meager apology with respect to technical shortcomings. With her numerous and unbroken successes—including a goodly list published in PHOTO-ERA since 1906—Mrs. Hayden was justified in adopting a semi-professional career which she still

follows. She has no studio, most of the professional work—portraits of children or mothers and children—being done in an upper chamber, by an east window, or at the homes of her clients. She states that she does enough professional work to pay for all her own photography. As an artist in genre and decorative photography, Mrs. Hayden ranks among the best.

Data: "The Baby later on"—December 5, 11 A.M.; near open east window; 5 x 7 view-camera, 11-inch Steinheil lens; used at full opening; 6 seconds; 5 x 7 Seed 26; metal-hydro; print, Willis & Clements Platinotype.

I wonder how many people who are fond of the winter-season—when they used to dread it—owe their change of prejudice to the beautiful pictures of snow-scenes that have been produced by means of photography. Among the numerous delightful portrayals of nature's moods, that have glorified these pages for many years past, snow-scenes with play of sunlight and shadow have appeared in large proportion and have been a constant source of pleasure. And winter-pictures made without the help of King Sol are very often dull and depressing. "A Touch of Winter," page 296, illustrates the value of sunlight when utilised advantageously. Camerists are very apt to err on the side of underexposure when dealing with snow-scenes illuminated by strong sunlight. By exercising excellent judgment, under such conditions, and appreciating the fact that underexposure, or overdevelopment, will cause the tree-trunks and other very dark objects to appear, *unnaturally and incorrectly*, as dead-blacks in the finished print, Mr. Wilson is able to produce beautiful and harmonious results. The student or the careless worker should examine closely the snow-covered surface in his "A Touch of Winter." Here is shown a full scale of gradations, and the large tree-trunk, too, has its correct tonal value. The tree-trunks and the mass of trees beyond, in the upper-left corner of the view, are too dark and, moreover, mar the otherwise delightful composition. They should have been entirely obliterated from the negative. Their presence in the picture prejudiced the PHOTO-ERA jury. Their absence would have won for the maker a prize, instead of an Honorable Mention, in the "Miscellaneous" competition, February, 1917.

Data: January, 1917; 10.35 A.M.; bright sunlight; 2¼ x 3¼ Icarette; Carl Zeiss Icar F/6.3; 3½-inches focus; stop, F/18; 5-time color-screen; 1/5 second; N. C. Film; Amidol; enl. on P. M. C. Bromide; Amidol.

The sympathetic nature of J. H. Field, the artist, was responsible for the touching little episode pictured on page 298. Tired out from strenuous physical exercise, probably, baby dropped to sleep over his meal. With true artistic perception, Mr. Field silently procured his camera and secured a touching incident in child-life.

In "Safety First," page 299, Mrs. Cassidy shows her sincerely sympathetic nature. Though photographing animals rarely (this is the first case with which I have become acquainted), her heart goes out to creatures that are defenseless, or seemingly so. Though fleet of foot, vivacious and vigilant, the gray squirrel is the prey of cat, hawk and—man. So the wise squirrel sometimes prefers to stow away a sweet morsel within easy reach of a place of refuge. But the squirrel pictured by our artist is of the rare, *white*, pink-eyed variety, which may be deemed of interest, pictorially and educationally. With one eye on the camerist (kindly and harmless Mrs. Cassidy!) and the other on the opening of the nearby log, the fluffy rodent performs this pleasant, filling task.

Data: 4 P.M.; 5 x 7 Graflex camera; Dagor lens; at full aperture; 1/10 second; 5 x 7 Standard Orthonon plate; tank-development; bromide enlargement.

Kenneth D. Smith has an eye for scenes of striking originality. This tendency characterises nearly every picture he has sent to PHOTO-ERA for publication, and includes "March-Floods," page 301. The force of the rushing, swirling, foaming waters is graphically pictured, and is strongly felt by the beholder. The point from which to obtain a happy, convincing combination of clearly and swiftly moving and of wildly agitated waters, was a very advantageous one. The picture received Honorable Mention in our "Marine" competition, last summer.

Data: March, 1921, forenoon; 4 x 5 speed Graphic; Carl Zeiss Ic Tessar; 7¼-inches focus; stop, F/8; 1/40 second; Graflex Film; pyro; enl. on Enlarging Cyko Plate.

Recalling the many delightful pictures from Alexander Murray's portfolio that have appeared in PHOTO-ERA, the reader will not hesitate to pronounce the "Chapel-Entrance" (page 302) a supreme masterpiece. In beauty of design, pictorial charm and religious sentiment, this little sanctuary is in a class by itself. As Christmas-day approaches, with its wealth of significance, the soul of every Christian will be filled with the spirit of peace and good-will. Let him not be unmindful of his divine duty on this day of days, and remember Mr. Murray's beautiful picture—"The Chapel-Entrance."

Data: Chapel at Forest Hills, Mass.; Nov. 11, 1918; 3 P.M.; shaded from sun; 4 x 5 Premo; 6½-inch B. & L. Special; stop, F/11; 1 second; Cramer Iso Medium; Amidol; enl. on P. M. C. No. 3 Bromide. The artist adds that he passed the forenoon of "Armistice Day" in Boston; the afternoon in Forest Hills with his camera, in peace and quietness.

Advanced Workers' Competition

THE burning of raked-up leaves or other rubbish, with the consequent column of smoke, presents a picturesque theme to most camerists. For this reason, the recent "Outdoor-Genres" competition yielded an unusually large number of entries of this character. This circumstance also accounts for the fact that two of the three prizes awarded went to pictures which had for their theme the burning of agricultural *débris*. To make up for this enforced lack of variety, the Editor presents, on page 312, a very deserving Honorable Mention—a different and inspiring subject.

In interpreting the theme of obliteration by fire, J. Kirkland Hodges has revealed a high degree of artistic imagination—quite in keeping with the character of the act. In his effort of repression, his breadth of treatment, and pictorial representation of a simplified theme, the artist has been preeminently successful. As a study in pictorial balance, also, the composition merits the highest commendation.

Data: Hazy light; 3A Kodak; Goerz Dagor; stop, F/11; 1/50 second; Eastman Film; Rytol; enlarged on Eastman Carbon Black; dev. in M. Q.

As a believer in the suppression of excessive detail, by legitimate optical means, hence a convert to the soft-focus lens, but always the true artist, J. H. Field merits the highest respect. His control of a type of lens which has justified its right to be classed as a valuable and permanent addition to the equipment of the first-class worker, is absolute. The farmer, as he stands well relieved against the smoke rising from burning waste, is a well-placed, picturesque figure.

Whether the work with the scythe has recently been completed, or is to be continued, is not apparent. There he stands, seemingly regarding the result of his labor or meditating on further work of destruction—to gather fuel for the not very fiercely burning fire. Page 306.

Data: September, 2 P.M.; bright light; 5 x 7 view-camera; 12-inch lens; stop, 16; 1.5 second; Eastman Portrait Film; pyro-soda; print, Artura Carbon Black D grade.

But in H. B. Rudolph's "A Slim Chance," page 307, there is energy to "burn." The title admits of two interpretations—the attitude of the player not promising a sure catch; or the direction of the ball precluding a secure clutch. In either case, the attitude and expression of the youngster betray eagerness, courage, enthusiasm, and, being also a complete and delightfully spontaneous composition, the picture seems to agree with the beholder as to whether the sphere will be caught or muffed.

Data: July, 10 A.M.; bright light; 5 x 7 Century camera; 7-inch Euryplan lens; at full opening (F/4.5); 1/500 second (Multi-Speed shutter); Stanley; metal-hydro; print, enlarged on P. M. C. No. 2.

In "Young Holland," page 312, the exuberance of youthful spirit is equally pronounced but possibly more convincing than in the child-ballplayer. The line has swung into the center of the picture-area and is well placed. One can almost hear the cries of merriment from the tiny maidens, though the boys seem a little reluctant. But, give them time; give them time!

Data: Made in Holland; July 10, 1921; 12.30 P.M.; sunlight; Imperial Ortho Special Sensitive, Backed (9 x 9 c.m.); 5½-inch Cooke lens F/4.5; used at full opening; 1/150 second; pyro-soda developer; print, bromoil on Kodak Royal Tinted; print for reproduction, glossy; camera, 9 x 9 c.m. Mentor Reflex.

Beginners' Competition

W. H. POTE was unquestionably enamored of the beautiful landscape he pictured so successfully, page 311. From his viewpoint, the scene is a trifle confusing. The beholder has little choice between the line of trees in the middle distance and the mountain-range. The foreground is flooded with light—not conducive, unfortunately, to unity and harmony in pictorial composition. Made later in the day (near 4.30-5.30 P.M.), the result would have been different, but happier. At present, there is no real center of interest. In a general way, the picture is attractive.

Data: July, 1.45 P.M.; bright light; 3¼ x 4¼ No. 3 Folding Ansco; 4½-inch Wollensak Modico Anastigmat F/7.5 lens; stop, F/16; 10-time light-filter; Eastman film; M. Q. in tray; print on soft Azo.

Example of Interpretation

THE picture illustrating a winter-sport in New Hampshire is peculiarly timely. The sports, when the snow is on the ground and on the hills, are manifold; the opportunities are numerous; the accommodations are adequate, and the air is fine and exhilarating. Americans do not need to leave their country for foreign parts, for the northern states can furnish all the popular outdoor winter-amusements and the necessary accommodations to visitors. Those interested in New Hampshire winter-sports need only to write to the Publisher of PHOTO-ERA, Wolfeboro, N.H., and they will be furnished with all necessary information.

Kenneth D. Smith has pictured the outdoor-sports in snowclad New Hampshire very effectively during

the past few years. His "Ski-ing in Franconia Notch" (N.H.), page 308, is a picture at once truthful and well composed. The end-man leads the eye along the line—to the right—and then upwards, obliquely, edging the slope of the mountain, until it stops at the upper left corner of the view.

Data: 3¼ x 4¼ R. B. Graflex; 7¼-inch Tessar; stop, F/8; 1/40 second; Graflex Film; pyro; dev. in tank; enlarged on Contact Enlarging Studio Cyko.

Our Contributing Critics

ELIZABETH B. WOTKYNs has courteously lent us a print of her beloved "Dear, Little, Dutch Boy," reproduced on page 314. She is conscious that the picture is not faultless, in several ways, but is desirous to profit by the suggestions of others who, in composing the picture, would have produced an artistically better result.

Data: Picture made in the shade of the house, against a portable background rigged up to suit the occasion; 3 P.M.; 3¼ x 4¼ Folding Pocket Kodak; 5¼-inch R. R. lens; stop, U. S. 4; 1/25 second; Speed Film; pyro.

The "Wolfe Artistic" Soft-Focus Lens

J. W. NEWTON, a formerly active photo-pictorialist, and for several years identified with the leading photo-supply house in Columbus, Ohio, has expressed his personal opinion, in a private letter, of the "Wolfe Artistic" lens. With Mr. Newton's consent, this illuminating letter has been made public.

Workers who are interested in new types of camera-lenses may have a free copy of Mr. Newton's valuable opinion of the "Wolfe Artistic," by addressing the Pinkham & Smith Co., 292 Boylston St., Boston, Mass., who will add, for inspection, specimen prints and enlargements.

O. C. C. Criticisms (Continued)

white background, and the other figure in white against the black wall. Only, this wall is so black as to make the dark hair lose itself too definitely against it. This defect, however, is probably not so obvious in the original print as in the reproduction. The foliage in the foreground, unexpected though it is, may be perfectly natural in that foreign setting. Would that I were a San-Diego-ite!

Y. BILLY RUBIN.

THE glaring mistake of this picture is its faulty composition. The eye enters at the central column, travels up and out at the top of the picture, missing the real objects of interest—the Spanish women. They become insignificant because of the evidence of the column. By covering the right half of the picture—see how uninteresting the uncovered portion is. Cover one and a half inches of that and see how detrimental it looks to the rest.

The eye now naturally seeks the figures of the women held in by the column on one side and balanced by the lantern on the other.

The figures are good and well posed, the background harmonious in its type—definition and depth in the shadows would have been good.

It could have been accomplished by more exposure with softer development and the contrast not lost.

MRS. STERLING SMITH.



ON THE GROUND GLASS

WILFRED A. FRENCH



The Dangers of Poor Composition

THE ability to produce a well-composed picture by photography is described by the uninitiated as a gift. As a matter of fact, this accomplishment may be acquired by instruction, observation or imitation. Be that as it may, a picture that has interest and beauty, and is well-composed, is likely to live and be a permanent source of pleasure. Sometimes, a picture that has the merit of the first two qualities, and lacks the last, may enjoy a long period of usefulness and then cease to interest its owner. That unfortunate condition is generally due to the discovery that the picture, whether a gift or a personal production, has some conspicuous fault. In such a case, no amount of argument will persuade the owner that the picture should not be condemned because of this one fault; that nearly every picture—yes, even some of the masterpieces in painting—suffers from bad drawing, poor color, divided interest or an objectionable accessory. Every time that he looks at the photograph—a landscape with figures, perhaps—his eye lights on that unsightly hair-ribbon on the innocent little girl. He sees nothing else. It does not occur to him to take the picture out of its frame and subdue the distressing object. As the picture continues to offend his suddenly educated eye, ceasing to be a source of pleasure to him, he consigns it to a place in the attic.

In preparing an enlargement for a Christmas gift, the amateur should be careful to choose a well-composed subject, unless the picture be of a personal nature—a memento or his own portrait. It will not do to suppose that the recipient of the gift is not an art-connoisseur, and may not notice any shortcomings in composition or workmanship. Even if he were not critical, the soothing assumption, "Where ignorance is bliss, 'tis folly to be wise," may not apply to this case. Some day, the recipient of the gift may discover for himself—unless some critical friend anticipates him—that the picture does not measure up to a high artistic standard, and then a period of dissatisfaction will set in. The consequences may not be favorable to the giver's critical judgment. If in doubt as to the picture's artistic qualities, the giver may well be guided by the opinion of a recognised art-expert.

Photography as a Profession

PHOTO-ERA is unique among photo-magazines in that it insists that workers who profess to be amateur photographers be so in a practical way, and not in name only. The Editor manifests little interest in the doings of those who are mere snapshooters, and urges that the rules of both PHOTO-ERA competitions be strictly observed. Among the practical workers, who apply to PHOTO-ERA for advice, are many who desire to take up photography professionally, and the advice given is based upon the ability displayed by the prints submitted.

Not long ago, I received a visit from a lady accompanied by her son, a mild-mannered young man of about twenty years of age. The object of the call was to ascertain if professional photography were remuner-

ative—how much money there was in it. The mother was in deep sympathy with her son who manifested a desire to take up photography as a means of livelihood because he had heard that it was a good, paying business. Asked to display the results of his hobby, he said that he had none. Requested to tell how far he had advanced in the art, he replied that he had no experience—in fact, he had no outfit and had no knowledge, whatever, regarding photography. He added that he had never seen a negative, did not know what it meant, and was about as well-informed about photography, in general, as a new-born infant! Asked, what he thought of photography as an art or a practice, he said that he might as well take up photography to earn a living, as anything else. I was greatly astonished, to say the least, at this particular choice, which was based upon nothing at all, not even enthusiasm, or ambition to excel. The mother, interested that her son take up photography, because that was the first thing that had occurred to him, inquired if there were a school of photography in Boston. I replied, truthfully, that there was none—at least, worthy of the name. After considerable talk, I decided to send mother and son to a well-known photographic expert, on Bromfield Street, in the hope that he might take pity on the young man and consent to give him lessons—the first steps in photography, provided that the applicant were able and willing to pay the expert's price. I learned from the expert, afterwards, that he found the young man lacking in intelligence and decided not to accept him as a pupil—at any price! I may add to this interesting incident, that both mother and son were disappointed when I advised against the proposition to send the young man to a school of photography in New York City, because, being poor, they could not afford to waste money on so doubtful an undertaking.

Views We Pass in the Day

My dear Mr. French:—That was, indeed, a lovely picture, the row of white birches, reproduced in October PHOTO-ERA, which you noticed while motoring at a high rate of speed along Middlesex Parkway, last summer. I, too, catch an occasional glimpse of a beautiful scene, from my motor, which speeds along the highway, at forty miles an hour (when it is safe to do so); but when I return to make a picture of it, it won't compose. There is generally something in the way that only skillful etching on the negative can remove, and I am a poor hand at that sort of thing. I think it requires a keen, experienced eye to tell the artistic possibilities of a scene while motoring at the rate of forty or more miles an hour. I prefer to be dropped in a promising locality, roam around for a number of hours, and be picked up later.

This speeding-business reminds me of a good thing I read in the paper, the other evening, "You were out motoring with Jack Speeder the other day. How did you like it?" "My dear, it was positively breathless. Only one remark was made by each during the entire ride. Jack said, 'Isn't it a fine view ahead of us!' and I replied, 'Indeed, it was!'"

ALLAN B. DALE.



EVENTS OF THE MONTH

Announcements and Reports of Club and Association Meetings, Exhibitions
and Conventions are solicited for publication



A Tribute to Pirie Macdonald

THE eloquent address delivered by Mr. Pirie Macdonald at the dinner arranged in his honor by the Professional Photographers' Association represents only a small part of the many things which the distinguished New York "photographer of men" said on the occasion. The formalities of the toast and its reply having been disposed of, a most enjoyable hour or two were passed in conversation on topics of professional photographic portraiture which have a common interest for photographers on both sides of the Atlantic. You cannot listen to Mr. Macdonald for very long without coming under the spell of his personality. As will be seen from his address, he himself has a very simple formula for his philosophy of life. Herein we think he is mistaken; if his formula of seeking to discover some reason or other for liking a man represented his attitude to life in the degree which he asked us to believe it did, he would be very different from the strong, human, complex character that he is. It requires a good deal more than the expressed amiable desire to be blind to people's failings to account for the big, broad personality of Mr. Macdonald or his great and healthy influence upon photographers in his own country. We could do with more men of his caliber here, and it is to be hoped that it may be possible for him to take part in a future Congress of the Professional Photographers' Association.

The British Journal.

Don't Copy Naturalisation-Papers

It is a government-offense to copy naturalisation-papers, with a fine of \$10,000.00 or 10 years' imprisonment. We have heard of a case where a photographer, quite innocently, copied such papers for a foreigner who was also quite innocent of any wrong intention. He was merely afraid that these valuable papers would be lost, and wished to have proof of his citizenship in such an event.

In this particular case, it was very evident that there was no wrong intent on the part of either party, so there was no prosecution. But you may not be so fortunate. So we have been requested by the photographer to bring this matter to the attention of his fellow-workers.

Naturalisation-papers are very precious, these days, and you may be asked to reproduce such documents. In such a case, you can inform your customer that our Government stands ready to give him copies of his papers in case they are lost, and explain that it is a punishable offense for any one to copy such documents.

Studio Light.

Portland Camera Club of Maine

THE annual exhibition of the Portland Camera Club, Photographic Section of the Portland Society of Art, Portland, Maine, will be held March 3 to April 2, 1922. The closing-date for entries is to be February 15, 1922. A larger and better salon is anticipated and a very high quality of work is expected. Inquiries will be answered gladly by the secretary.

Photographs as Christmas-Gifts

AMATEUR workers, in preparing photographic prints, whether in monochrome or colored, to be used as Christmas-gifts, should exercise the same care as if they intended to exhibit them at their camera-club or at a salon. The thought that the intended recipient may not be a good judge of pictures, or that "one should not look a gift-horse in the mouth," or that he may never discover "what is wrong in this picture," should not enter the head of the maker or giver of the picture. The Editor respectfully invites the reader's attention to his series of remarks on this timely topic printed on the Groundglass page of this issue.

Dr. Lovejoy an Enthusiastic Pictorialist

IN the November issue we referred to Dr. Rupert S. Lovejoy and his one-man show to be held at the Camera Club, New York City, beginning November 1, 1921. Although we knew Dr. Lovejoy to be a pictorialist of the very first rank and have admired his masterly multiple-gum and bromoil pictures, we were glad to learn that he had won an enviable position in the leading salons and exhibitions in the United States and England. Dr. Lovejoy is a member of the Pittsburgh and Los Angeles Salons, and a regular exhibitor at both; his work is always very favorably received at the London Salon; moreover, he is a member of the Boston Society of Arts and Crafts, Pictorial Photographers of America and of the well-known Portland Photo Pictorialists. Surely this is a record of which any pictorialist may be proud. Incidentally, it should be an inspiration to many of our readers "to go and do likewise."

An Unintentional Omission

IN the November issue we published a splendid article, "Experiences in Stereoscopic Photography," by A. Jupenlaz, which many of our readers have written to us about in very complimentary terms. As is our custom, we refer to the work of our contributors in the department "Our Illustrations," but in the case of Mr. Jupenlaz, the usual editorial reference was omitted through an unintentional oversight during the busy days that immediately precede going to press. We take this opportunity to assure Mr. Jupenlaz and our readers that the omission on our part was due to no lack of merit or interest in this excellent article.

A Darkroom in a Man's Coat-Pocket

THE SHOP OF PINKHAM & SMITH CO.'s next-door neighbor, on Bromfield Street, was the scene of a daylight-robbery, recently, and an interested crowd gathered in the store. A few days later, and at about the same time,—noon,—a crowd collected in Pinkham & Smith's store. Curious to learn the cause, we stepped inside. Instead of a hold-up, it proved to be a photo-demonstration. Mr. H. P. Sautert, of Burke & James, Chicago, was explaining the use of a novelty—a com-

fact, daylight, developing-outfit. A long, narrow, flat rubber-bag lay extended on the counter. Gently passing his hand along the top of the bag, Mr. Saubert explained that inside, the entire length of the bag, lay the strip of a six-exposure film, covered with developer. After it had lain there some five minutes, he opened one end, poured out the developer, replaced it with water, agitated the bag, then withdrew the film and fixed in the usual way. In ten minutes he picked up the film, showing the astonished but satisfied audience a clear, correctly developed strip of film. Emptying the attenuated bag, Mr. Saubert rolled it up and put it in his coat-pocket. Several spectators were heard to declare that it was just the thing for their trips to Florida and the West Indies, this coming winter. For that matter, this small daylight-equipment is good for any journey, nearer home and any season of the year. To think that a convenient darkroom can now be condensed into a space no bigger than the inside of a man's pocket!

An Overexposed Marine-Picture

In some inexplicable manner, in his article, "Portrait Films and Development"—published in our October issue—the author (E. M. Barker) was made to state that his picturesque marine, "Hampton Roads," page 175, received an exposure of nine (9) seconds! The data that followed the mention of "Hampton Roads" (page 180) applied to another picture, *viz.* "Emanuel Episcopal Church," which is on page 248, the November issue. All the same, the proper data for "Hampton Roads" were printed in "Our Illustrations" for October, and, among other items, contained the correct exposure of Mr. Barker's superb marine, *viz.* 1/25 second.

Mr. Barker is an accomplished picture-maker and photographic technician, and, though he can give a plate ten times the normal exposure and produce a perfect negative, he cannot do the impossible—accord a marine with moving craft nine seconds' exposure and effect a successful result!

An Improved Service

It is always gratifying to see real merit win its way, whether it be in one line of business or in another. When a steady demand for a product compels a manufacturer to provide additional facilities to take care of his customers, it may be assumed that the commodity is giving satisfaction. In the present case, we refer to Frederick W. Keasbey, the manufacturer of the Struss Pictorial Lens. To serve his customers to better advantage, Mr. Keasbey has arranged with Hathaway-Dunn, Inc., 22 East 30th Street, New York City, to carry in stock a complete line of lenses and accessories. Mr. Dunn, of the firm, will be remembered as Dunn "The Lens Man." His technical and general photographic experience ensures the best attention to inquiries at all times.

Film-Pack vs. Roll-Film

EVER SINCE the arrival of the film-pack in the evolution of modern photography, certain amateur and professional workers have considered it to be far superior to the roll-film. On the other hand, the roll-film has its staunch adherents, so that the friendly discussion is virtually deadlocked at the present time. As if to meet the wishes of all workers and avoid re-opening the discussion, The Sagamore Chemical Company, New York City, announces that it now offers both Agfa

film-packs and Agfa roll-films of excellent orthochromatic connection and speed. Moreover, the film-packs are of metal construction which ensures a flat focal plane, the film-stock is thicker and coated on one side only—an advantage in drying—and the metal containers may be used afterwards for a negative-file. The prices are the same as standard American-made films. Agfa products are now obtainable on the Pacific Coast through Hirsch & Kaye, 39 Grant Ave., San Francisco, who also carry PHOTO-ERA MAGAZINE regularly.

Cooke Lenses—American Agency

AMONG the camera-lenses of English origin and construction, which enjoy world-wide reputation, are the Cooke lenses. Since the World War began—seven years ago—the American agency (in New York City) was discontinued and, indeed, the foreign business of the manufacturers was sadly interrupted, although the firm was kept busy supplying the home-government with high-class optical instruments for war-purposes.

Burke & James, Inc., of Chicago have now been appointed sole American agents for the entire line of the famous Cooke lenses, a complete stock of which is expected shortly, when the hustling Chicago distributors will be prepared to meet the requirements of the photographic trade.

What is the Best Printing-Process?

THIS is a question that is old and, yet, ever new. Camera-club members in all parts of the world have their ideas and their own experiences to relate in support of their favorite printing-process. To say the least, the discussions are usually very interesting, if not always convincing. In hearing and reading of these friendly discussions, we have noted that the bromoil process is very popular with a number of well-known photo-pictorialists. For a time, it was difficult to obtain the necessary supplies; but we are glad to call attention to the complete stock of Bromoil Paper and supplies now to be had from Ralph Harris and Company. This firm, it will be recalled, is the sole American agent for the famous Wellington products. Those who wish to make bromoils may now obtain the necessary materials and instructions; and thus prove to their own satisfaction whether or not the bromoil process is what some workers claim it to be—the best printing-process.

Read the Magazine of Your Business

EACH issue of every business, class, professional and technical magazine is filled with detailed accounts of ways in which enterprising men are utilizing present-day conditions to make better records than they ever made before. You need to read one or more of the magazines of your business to be well informed. In business, watch your competitors. No individual or concern has a monopoly of all the best brains and methods. Find out what the other fellow is doing—and go him one better. Crowley, 511 East 164th Street, New York City, has issued a valuable 146-page descriptive booklet in which are listed all the leading business, class, professional and technical publications of the country. There are many of our readers to whom such an instructive catalog would be of service in their business and professional life. It may be obtained free of charge by writing to the publisher.



BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished by us at the lowest market-prices. Send for our list of approved books.

TWELVE GREAT PAINTINGS—Personal Interpretations.

By Henry Turner Bailey. Format, 8 x 10 inches. 12 full-page photographs in halftone. Cloth, \$3.00. New York—Chicago: The Prang Company.

When the power of a searching, analytical mind, sensitive and imaginative, contemplates a great work of art, and is profoundly impressed by it, his expressed opinion is bound to be entertaining. Henry Turner Bailey, director of the Cleveland School of Art, responsive to the appeal exerted by twelve great paintings, has been pleased to give to the public his personal impressions. These, in their turn, cannot but impress the reader who yields to the spell of these works of art. The lover of the beautiful—of the masterpieces in painting—will be in sympathetic accord with Mr. Bailey, who in glowing terms describes, one after another, twelve paintings that impressed him deeply. To be sure, the chief elements of appeal of six of these masterpieces are of a religious and spiritual character, and exert an exalted influence upon the beholder. The emotions produced in Mr. Bailey, as he contemplates the "Sistine Madonna," Raphael's "Transfiguration," Titian's "Assumption" and "Pietà," will be shared by all sincere picture-lovers. In referring to the wonderful portrait of Pope Innocent X. by Velasquez, Mr. Bailey enunciates important truths in characterisation that will be appreciated by the makers of exemplary portrait-photographs. They certainly will be found very helpful; indeed, the worker in pictorial photography will derive pleasure, profit and inspiration from Mr. Bailey's personal interpretations.

The twelve pictures, admirably reproduced in halftone, are as follows: Pope Innocent X. by Velasquez; Spring, by Corot; Ulysses Deriding Polyphemus, by Turner; Creation of Man, by Michelangelo; Saint Barbara, by Palma Vecchio; The Mother, by Whistler; Judith with the Head of Holofernes, by Botticelli; The Golden Stairs, by Burne-Jones; The Sistine Madonna, by Raphael; The Transfiguration, by Raphael; The Assumption, by Titian; Pietà, by Titian.

It is not too much to hope that this attractive volume will find a conspicuous place in the library of every photo-pictorialist and student in pictorial photography.

KINEMA HANDBOOK. By Austin C. Lescarbourea. 517 pages. 221 illustrations, many tables and formulae. The size of a prayer-book. Bound in full blue fabrikoid, pocket-book style, blue under gold edges, and round corners. Price, \$3.00. New York, U. S. A.; Scientific American Publishing Company (Munn & Co.), 1921.

Readers of PHOTO-ERA MAGAZINE will remember our review of Mr. Lescarbourea's delightful volume, "Behind the Motion-Picture Screen," in our issue of June, 1920. It will be recalled that we considered this first effort of exceptional merit and as complete a popular treatise on the subject as could be written. However, in "The Kinema Handbook," Mr. Lescar-

bourea has outdone himself in that he has written a little volume that will appeal strongly to those who are realising, as never before, the important place that the motion-picture is beginning to occupy in business, college, school, church, club, and home.

"The Kinema Handbook" is not intended for the professional motion-picture photographer. It is of immediate interest and practical value to the non-theatrical worker. It is intended for the business-man, naturalist, traveler, explorer, microscopic worker, teacher, engineer, and those who wish to see their work on the screen. Moreover, it is a splendid textbook for those who are eager to obtain the highest form of entertainment for the club, church, school, community-gathering, and the home.

A glance at the chapter-headings will show how comprehensive and practical this little volume has been made: Principles of Motion-Picture Apparatus; Selecting the Proper Type of Camera for the Job; Tripods and Other Accessories for the Camera; The Operation and Care of the Motion-Picture Camera; Developing and Printing the Film; Projectors for Professional and Amateur Use; Projecting and Caring for the Positive Film; The Animated Album; Films of Family Friends and Pets; Planning and Filming the Amateur Photoplay; Filming News and Magazine-Features for the Screen; The Why and Wherefore of Screen Advertising; Telling the Business-Story in the Film-Language; The Acetate Film, or Motion-Pictures Made Safe; Special Applications of Motion-Picture Photography and Miscellaneous Data and Formulae.

Virtually every standard motion-picture camera and projector is mentioned by name and its operation described in detail. Formulae to develop and fix the film are given; and, in short, the reader is placed in a position to obtain results. And yet, the author has avoided all technical language and has written the little volume in such a clear, interesting style that the layman can read it easily with pleasure and profit.

"The Kinema Handbook" should be in the hands of every person who realises the value of the motion-picture in business, science, school, church, club, and home. It is the open sesame to immediate, practical and remunerative results.

Picturing the City of Boston

CONSISTENT with its characteristic enterprise, the B. Y. M. C. U. Camera Club will hold a public exhibition at the Boston Public Library of photographs of the City of Boston, December 12 to 26. The prints will be exclusively by members of the club, over one hundred, who will work systematically under the direction of President Herbert B. Turner, so that the collection shall be as comprehensive as possible. This is the first time in the history of Boston that so extensive a work has been undertaken.



Ownership of Bissell Colleges Changed

THE well-known Bissell Colleges of Photography and Photo-Engraving, Effingham, Illinois, have been purchased by E. E. Flack and Le Grand A. Flack. The latter has been Mr. Bissell's secretary and will take the personal direction of the school in the future. The new management will keep fully abreast of the times and will maintain the present excellent reputation enjoyed by these schools. We wish the Bissell Colleges every success under the new management.



LONDON LETTER

CARINE AND WILL CADBY



A VISIT to the Royal Photographic Society's exhibition is a cheering experience. This, its sixty-sixth annual show, is a decided improvement on that of last year. We refer here to the pictorial section, which we should say has fewer exhibits than formerly. But many of the pictures hung are well worth careful study, and there seems to be far less of the obvious bromide enlargement class of views than usual. In using the words "bromide enlargement" in a deprecating sense, we mean nothing against the process, itself, only the stereotyped, dull manner in which it used to be treated. Indeed, many of the portraits in this year's show are simply stated to be "bromides," or "bromide enlargements," and yet they are often of a tone and texture that clearly demonstrate that workers are at length taking this most useful and capable printing-method seriously, and in return obtaining some very striking and varied results. As a case in point, we might refer to "Mrs. R.," by Aage Rømfeldt, a dark yet luminous subject with much depth and rich color. Also, Charles Borup has three bromide portraits in what we might call the semi-professional manner, that is to say, they are technically perfect and are also sympathetically handled, as regards the sitter. But portraits, this year, are a strong point at the Royal, and there is a large number of sound, pictorial renderings.

Mr. Herbert Lambert has several pictures of children which are absolutely satisfying, in every way. Mr. Lambert is a professional photographer of Bath, and the wonderful thing about his work is the success with which he contrives never to get into a groove. Although he must have made thousands of portraits of young people, he always shows in his exhibition-prints something fresh in his view of the sitter, and often in the lighting. Now we know from experience how difficult this is. The uninitiated would probably account for it partly by declaring that he was lucky in his models; but luck enters very little into such splendid portraiture as Mr. Lambert evolves.

Bertram Cox's three bromoil landscapes on rough paper are particularly satisfactory, because they have retained the brightness and daylight of the scenes portrayed, besides being admirably composed. So often a landscape is spoiled by being overprinted, or too dark in tone all over, when it is obviously intended to suggest a sunny aspect. These pictures, viewed from a little distance, run the draughtsman's or the engraver's art very close, and possess qualities that neither could hope to attain. A print of a quite unpromising subject, called "The King's Arms, Pentyock, Glam.," should be mentioned. Here, there is just three depressing looking windows and a door, in the ugliest brick and mortar structure it is possible to imagine; and yet through lighting, sky and a printing-method exactly suitable to the strong effect, it is made not only interesting but quite attractive and decorative. No better example of the absolutely vital importance of lighting could be given. The sun strikes the edges of the depressingly mean door and windows, and coupled with a big white cloud behind, reproduces and possibly accentuates what must have been a very delightful effect of light.

"Three Miles Above the Earth" is a fine example of aerial photography. It is a cloudscape that gives the spectator a glimpse of the beauty and wonder of the cloud-world as seen from above. And just the right size, and correctly placed, so that it lends immensity to the view, is an airplane flying close against the near clouds. A photograph, called "Dancer," by F. E. Cedeberg, from Sweden, contains a lesson for many of us. Although almost a silhouette against light, it is alive with strength and delicacy and grace, and the dress of the dancer despite being dark is luminous and transparent, convincing one that against-the-light subjects need not be heavy or opaque, if properly treated.

On the staircase there are examples of work sent in to last winter's Kosmos £1,000 Prize Competition. Taken as a whole, they are not particularly inspiring.

In the Scientific and Technical Section, Hans Wango has three sharp and clear aerial photographs of Kristiansborg, Copenhagen and Kronborg. The airplane must have been flying very low, for the people can be distinguished in the streets, and the prints combine the qualities of map and photograph in a wonderful degree. There are also two large prints of a water-spout in the Black Sea, one photographed twelve seconds after the other, which are more enlightening than pages of description as to what such an uncanny event looks like.

The photography of natural-history subjects by flashlight is being encouraged, and there are a number of exhibits. It is contended that "in the illustrating of new facts and details in connection with the life-history of insects, the naturalist has many difficulties to contend with, in particular with those whose activity is latent during the hours of daylight." Consequently, flashlight is a very valuable help. Among these exhibits, there is a remarkable set of prints, called "The Garden-Spider At Home." In one photograph he is shown life-size, and in another we have him (or is it her?) enlarged three diameters—truly an awesome-looking individual.

There are all sorts of eye-openers and surprises in this section. One little frame, containing two prints side by side, shows the gin-drinker the appearance of his much-tried liver, as compared with that of a normal person. It was good "Pussyfoot" propaganda, and we passed on almost confirmed teetotallers, for the gin-soaked liver was a poor, diffused, disintegrated-looking affair, and we felt a comfortable assurance that our internal organs, despite occasional lapses from pure "Pussyfootism," more nearly resembled the well-defined, normal example on the walls.

There are many transparencies, color-prints and color-plates; but still the artistic side of color-plates does not seem to be fully developed, although the technical qualities are irreproachable. We still look in vain for the masterly and daring effect carried out in color.

On the Ground Floor there are examples that illustrate the photographic side of Radiography, by N. E. Lutoshez, and specimens of the work of some of the leading English Radiologists, the negatives for which

(Continued on next page)



RECENT PHOTO-PATENTS

Reported by NORMAN T. WHITAKER



THE following patents are reported exclusively for PHOTO-ERA MAGAZINE from the law-offices of Norman T. Whitaker, Whitaker Building, Washington, D.C., from whom copies of any one of the patents can be obtained by sending twenty-five cents in stamps. The patents mentioned below were issued from the United States Patent-Office during the month of October.

Albert Buchi, of Klosters, Switzerland, has received patent 1,390,336. This patent is a Time-Switch for Photographic Purposes.

Patent, number 1,390,983, has been issued to Daniel F. Comstock, of Brookline, Mass. His patent is on Color-Kinematography.

A Holding Means for Photosensitive Plates and the Like has been invented by William C. Huebner, of Buffalo, N.Y. This patent bears the number 1,391,116. 1,391,310 is the number which has been assigned to the patent issued to William Friese-Greene, of London, England. It is a new idea in Color-Photography.

Another foreigner who has received a patent on photography from the U.S. Patent Office is Henri R. Ponton, of Paris, France. It is a patent on a Photographic Shutter and has received number 1,391,790.

An Exposure-Indicator has been granted to Ernest E. Underwood, of Rochester, N.Y., the patent-number being 1,391,870.

George I. Schreiber, of Newark, N.J., has received patent, number 1,391,982, for a Photographic Film-Supporting Frame.

Patent, number 1,392,144, Portable Camera-Support has been issued to Samuel R. Gray, of Germantown, Pa. Photoprinting Device is the title of the patent issued to Henry G. Eisenhand, of Denver, Col.; number is 1,392,312.

A patent has been issued to Louis F. McKelvey and John A. Brandenberger, of Indianapolis, Indiana. The number is 1,392,516 on a Photo-Filmclip.

Joseph Goddard, of Rochester, N.Y., has received patent, number 1,392,759, on a View-Finder for Photographic Cameras.

Patent, number 1,392,876, has been issued to John J. Leonard, Los Angeles, California. The device is an Adjustable Iris for Cameras.

John B. Garrett, of Troy, N.Y., has been granted a patent on Daylight-X-Ray-Film-Developing Tank, number 1,393,108.

Another patent granted the same inventor is a Film-Envelope. Patent-number is 1,393,109.

A Multiple-View Camera has been invented by Peter B. Venuti and Charles H. Arnold, of Dayton, Ohio. Patent number, 1,393,411.

New Edition of a Valuable Chemical Booklet

AMATEUR and professional photographers will welcome the new edition of a practical, up-to-date, chemical booklet that will help them in their photographic work. Merck & Co. are distributing a new edition of their booklet "Blue-Label Reagents and Other Laboratory-Chemicals." Merck's Blue-Label Reagents, familiarly known as M. B. L., are made according to the requirements in "Standards and Tests for Re-

agent Chemicals," published in 1920 by D. Van Nostrand & Co., of New York, and a special feature of the new catalog is the concise summary under each reagent showing its standard of purity, methods of testing, and other data taken from that textbook with the author's permission. Such of Merck's "White Label" chemicals of "H.P.," "C.P.," and other grades as are of particular interest to laboratory-workers are also listed and current prices are given throughout. The booklet, therefore, should be of interest to chemists generally as a manual and price-list. Copies may be obtained by addressing Merck & Co., 45 Park Place, New York.

"All in a Nutshell"

A FEW weeks ago one of our subscribers asked us to tell him how he might obtain a thorough grounding in the rudiments of photography within the least possible time and at a minimum of expense for the necessary chemicals. He stated that he was a busy executive in a large firm and that he had very little time to devote to photography although he was tremendously interested in it. Moreover, he added that he had no dark-room and could not have one, neither did he know anything about the accurate preparation of photographic chemicals or the matter of correct exposure. In the circumstances, we advised him to obtain a copy of the Wellcome Photographic Exposure Calculator Handbook and Diary. He did so, and later wrote us that it was photography "all in a nutshell," and that his first experiments resulted in splendid success. Burroughs Wellcome & Co. publish this little book each year and it may be obtained through dealers. Those of our readers who wish to get accurate photographic advice to help them make good pictures should get the 1922 issue of this valuable little book.

London Letter

(Continued from preceding page)

were made on Eastman duplitised X-ray film. Here we noticed a goodly number of portraits of people's jaws and teeth, and we suddenly felt uncomfortably at home, having been studying, earlier in the day, similar examples of our own dental deficiencies at a doctor's; so we reluctantly left this quite interesting and varied exhibition, conscious that we had explored not nearly all the wonders to be seen.

The Kodak Company has organised a £1,000 Competition open to every amateur photographer. Any camera and any photographic material may be used. It is the picture that will be judged, not its photographic quality. There are various subjects set for the next six months, those for October being the most suitable picture illustrating "October," or as an alternative "Out of Doors in Autumn." There will be two sections of the competition—one for those over sixteen, and the other for all below that age. The prizes range from £50 to 10/—, and Sir Arthur Conan Doyle and Mr. Gerald du Maurier are the judges for the October entries.

Wollensak

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Vol. 1

DECEMBER, 1921

No. 12

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From 7 x 11 negative made by Mr. Frederick C. Wainwright with 6 1/2 x 8 1/2 Series II Velostigmat, 9 1/2" focus.

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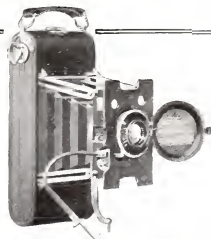
P.S. There are Velostigmats, almost as fast, for the advanced amateur.

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is only one of the qualities of the speedy anastigmat, the Series II Velostigmat F:4.5. Concerning the work of this lens, as illustrated above, Mr. Wainwright writes:

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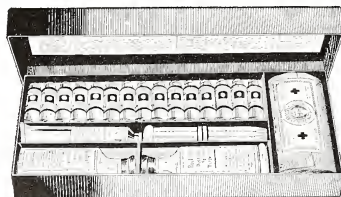
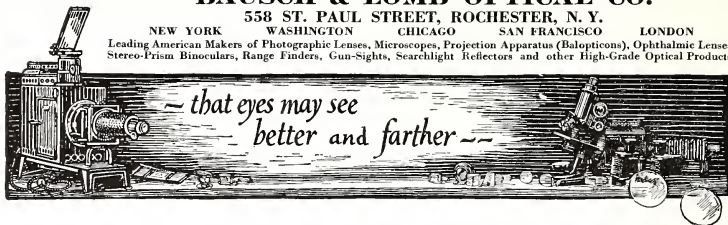
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will be found listed below. For detailed information regarding them, read the reviews in the issues of PHOTO-ERA MAGAZINE indicated at the right of each title. Orders for any of these books will be filled promptly at the published price.

Any photographic or art-book, not in this list, will gladly be procured at request.

PHOTOGRAPHIC BOOKS

Airplane-Photography	Herbert E. Ives	\$4.00	Dec. 1920
American Annual of Photography 1922 (cloth)	Percy Y. Howe	2.50	
Behind the Motion-Picture Screen	Austin Lescarboura	3.50	June 1920
Condensed Course in Motion-Picture Photography	N.Y. Institute of Photography	6.00	Aug. 1920
Everman's Chemistry	Elwood Hendrick	2.00	Dec. 1917
Handbook of Photomicrography	H. Lloyd Hind & W. B. Randles	4.00	June 1914
How Motion-Pictures Are Made	Homer Croy	4.00	Jan. 1919
How to Make Good Pictures	Eastman Kodak Company	.40	
How to Use the Air-Brush	Samuel W. Frazier	1.50	
Kinema Handbook	Austin Lescarboura	3.00	Dec. 1921
Light and Shade—And Their Applications	M. Luckiesh	3.50	
Modern Telephotography (paper edition, \$1.50)	Capt. Owen Wheeler	1.75	Aug. 1910
Optics for Photographers	Hans Harting, Ph.D.	2.50	Aug. 1918
Photo-Engraving Primer	Steven H. Horgan	1.50	Nov. 1920
Photograms of the Year 1920	F. J. Mortimer, F.R.P.S.	3.50	Mar. 1921
Photography and Fine Art	Henry Turner Bailey	2.50	Apr. 1919
Photography and Its Applications	William Gamble, F.R.P.S.	1.00	Nov. 1920
Photography for Students of Physics and Chemistry	Louis Derr, A.M., S.B.	2.25	Dec. 1913
Photography in Colors	George Lindsay Johnson	3.00	Sept. 1914
Photography—Its Principles and Applications	Alfred Watkins, F.R.P.S. <small>English Edition</small>	4.00	Apr. 1920
Photography of To-Day	H. Chapman Jones, F.R.P.S.	2.50	Dec. 1912
Pictorial Composition in Photography	Arthur Hammond	3.50	Aug. 1920
Pictorial Photography in America 1921		3.00	Jan. 1921
Practical Kinematography and Its Application	Frederick A. Talbot	1.50	
Practical Photo-Micrography	J. E. Barnard	5.00	
Professional Photography (two volumes)	C. H. Hewitt	1.75	May 1919
Saturday with My Camera	S. C. Johnson	2.00	Nov. 1914
Systematic Development of X-ray Plates and Films	Lehman Wendell, B.S., D.D.S.	2.00	Feb. 1920
The Air-Brush in Photography	George F. Stine	3.50	Nov. 1920
The Commercial Photographer	L. G. Rose	4.00	Oct. 1920
The Dictionary of Photography	E. J. Wall, F.R.P.S.	5.00	July 1917
The Fine Art of Photography	Paul Lewis Anderson	3.00	Nov. 1919
The Fundamentals of Photography	C. E. K. Mees, D.Sc.	1.00	Oct. 1920
The Optical Projection	Russell S. Wright	1.60	Nov. 1920
Topsy and Turvy (with original animal-photo's)	Carine and Will Cadby	1.60	Feb. 1920
Wonderland of the East	William Copeman Kitchin, Ph.D.	6.00	Apr. 1921

ART-BOOKS

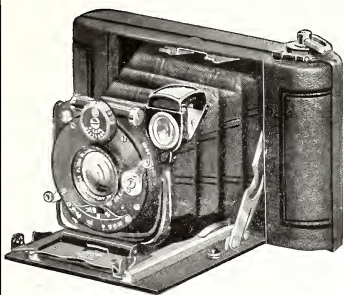
A Treatise on Art In Three Parts	John Burnet, F.R.S.	\$2.00	Dec. 1913
Art-Treasures of Washington	Helen W. Henderson	3.00	Feb. 1912
Boston Museum of Fine Arts	Julia De Wolf Addison	3.00	Aug. 1910
Composition in Monochrome and Color	Arthur W. Dow	5.00	Apr. 1913
How to Study Pictures	Charles H. Caffin	4.00	
Picture-Dictionary	J. Sawtelle Ford	1.00	Oct. 1917
Twelve Great Paintings	Henry Turner Bailey	3.00	Dec. 1921
The Art of the Wallace Collection	Henry C. Shelley	2.50	July 1913
The British Museum: Its History and Treasures	Henry C. Shelley	4.00	Mar. 1912

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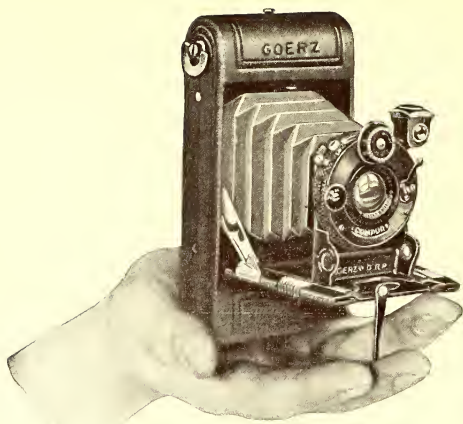
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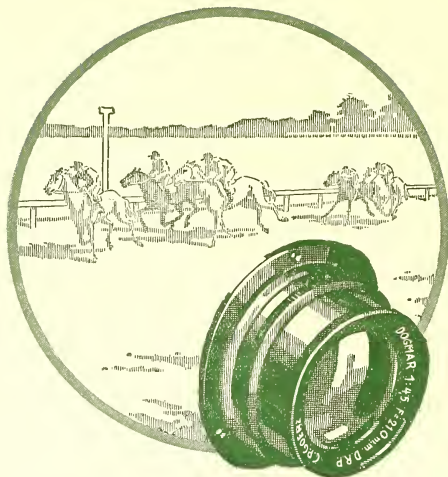
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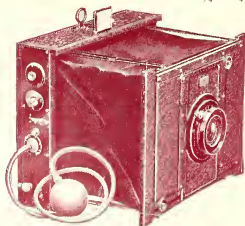
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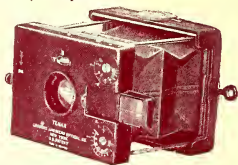
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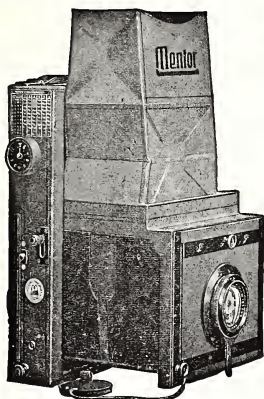
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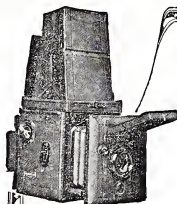
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Contents for July, 1921

ILLUSTRATIONS

The Maid of Marblehead.....	Raymond E. Hanson.....	Cover
The Maid of Marblehead.....	Raymond E. Hanson.....	Frontispiece
The Monarch Butterfly.....	Kenneth Dudley Smith.....	5
Humming-Bird.....	Kenneth Dudley Smith.....	6
Silver-Wing Butterfly.....	Kenneth Dudley Smith.....	7
Fairy Airplanes.....	Kenneth Dudley Smith.....	8
The Dancer.....	Ralph Osborne.....	10
Fountain at Night.....	Henry Shaw.....	11
Gloucester Fishermen.....	Ralph Osborne.....	12
Bug-Eye.....	W. L. Manson.....	13
From the Shore-Path.....	O. R. Perry.....	14
Mallard Duck.....	W. J. Jaycock.....	15
Miss G.....	George S. Akasu.....	16
Mr. Kiley.....	Louis Astrella.....	17
Nude-Study.....	Victor D. Elmore.....	18
Portrait.....	M. L. Vincent.....	19
Street in Albi, France.....	Herbert B. Turner.....	20
Fisherman, Hangchow, China.....	Henry Echbheim.....	21
Decorative Winter.....	G. H. Seelig.....	22
Evening on the Shawshen.....	Raymond E. Hanson.....	23
My First Photograph.....	Wilfred A. French.....	24
Wild Roses.....	Frank A. Waugh.....	26
New England Asters.....	Frank A. Waugh.....	27
Starlight.....	William Ludlum.....	29
First Prize—Home-Scenes.....	Kate Matthews.....	33
Second Prize—Home-Scenes.....	George W. French.....	34
Third Prize—Home-Scenes.....	Hannah G. Myrick, M.D.....	35
First Prize—Beginners' Competition.....	Ellen C. Hildebrand.....	39

ARTICLES

The Maid of Marblehead.....	Raymond E. Hanson.....	3
Nature-Photography for Sport.....	Kenneth Dudley Smith.....	4
Boston Y.M.C.U. Camera Club Exhibition.....	Ralph Osborne.....	10
My First Photograph.....	Wilfred A. French.....	24
Photographic Diversions of a Landscape-Architect.....	Frank A. Waugh.....	26
You Push the Button.....	H. W. Correll.....	28
Starlight (Poem).....	William Ludlum.....	29

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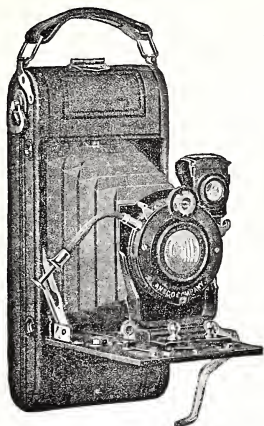
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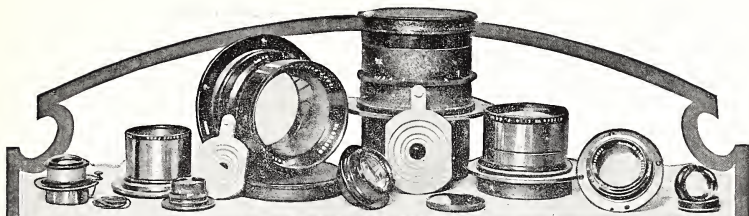
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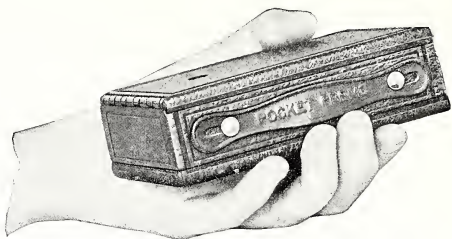
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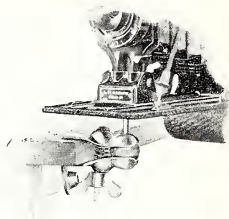
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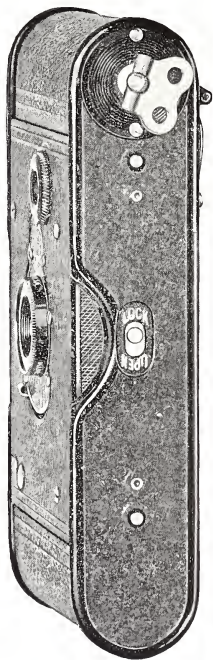
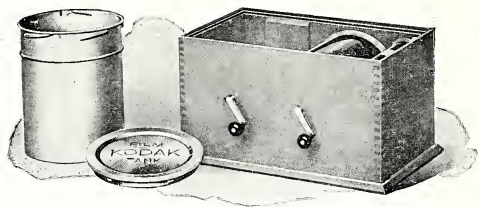


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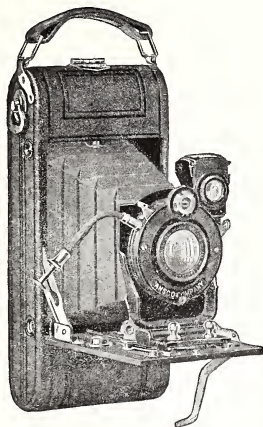
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Contents for August, 1921

ILLUSTRATIONS

New England Farmhouse.....	Stephen Marsh.....	Frontispiece
The "Feather-Duster," Wolfeboro, N.H.....	Turner and Osborne.....	Cover
Old Emerson House, Ipswich, Mass.....	Turner and Osborne.....	58
Lord-Morrison House, Portsmouth, N.H.....	Turner and Osborne.....	59
Toll-Gate on the Piscataqua.....	Turner and Osborne.....	60
Our First Glimpse of the Sea.....	Turner and Osborne.....	61
Roadside Water-Hole.....	Turner and Osborne.....	62
The "Feather-Duster," Wolfeboro, N.H.....	Turner and Osborne.....	63
Wolfeboro Bay from Brewster Free Academy.....	Turner and Osborne.....	64
Rural Free Delivery, Wolfeboro, N.H.....	Turner and Osborne.....	65
Lake Winnepesaukee Vista.....	Turner and Osborne.....	66
Lakeside Farm.....	Turner and Osborne.....	67
An Old Homestead.....	Turner and Osborne.....	67
Brooklyn Pitchers Warming-Up.....	Leonard C. Lee, Jr.....	69
Crack!.....	Leonard C. Lee, Jr.....	69
The Heavy Hitter.....	Leonard C. Lee, Jr.....	70
Safe at Third!.....	Leonard C. Lee, Jr.....	71
The Fallaway Slide.....	Leonard C. Lee, Jr.....	72
Not Quite.....	Leonard C. Lee, Jr.....	72
Back in Time.....	Leonard C. Lee, Jr.....	73
"To Second!".....	Edward C. Day.....	74
My First Photograph.....	Rudolf Eickemeyer.....	77
A Summer-Sea.....	Rudolf Eickemeyer.....	79
Attention!.....	William S. Davis.....	81
Evening on the Nishna.....	A. S. Workman.....	83
Marriage-Procession of Priscilla.....	Harold Gray.....	84
Second Prize—Street-Scenes.....	Elliott Hughes Wendell.....	87
Third Prize—Street-Scenes.....	Donald R. Battles.....	88
Honorable Mention—Street-Scenes.....	Gertrude Bennett.....	89
First Prize—Beginners' Competition.....	Dr. Clinton L. Decker.....	93
Second Prize—Beginners' Competition.....	W. J. Burelbach.....	94

ARTICLES

A Pilgrimage to Wolfeboro, New Hampshire.....	Turner and Osborne.....	57
Base-Ball Photography.....	Leonard C. Lee, Jr.....	68
Livelihood or Pastime?.....	W. P. Mattern.....	75
My First Photograph.....	Rudolf Eickemeyer.....	76
True Education.....	Edward Shaunesy.....	78
Hobbies.....	Sigismund Blumann.....	80
Speed-Limits.....	British Journal.....	82

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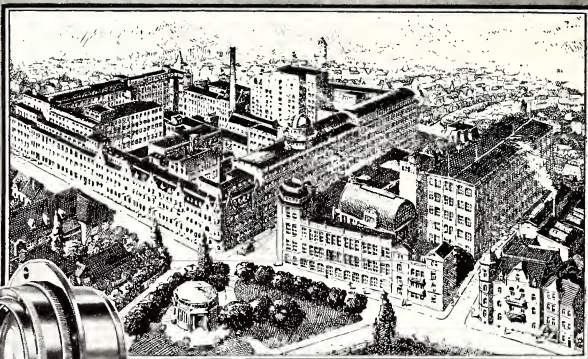
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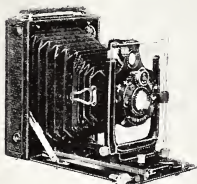
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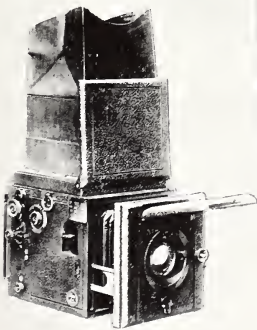
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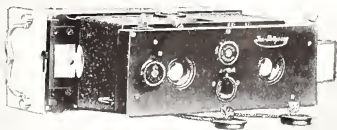
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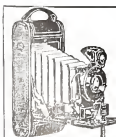
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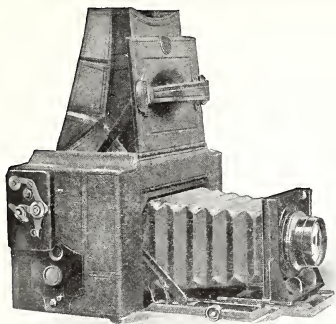
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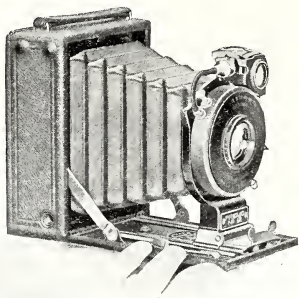
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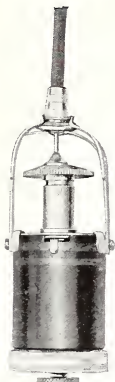
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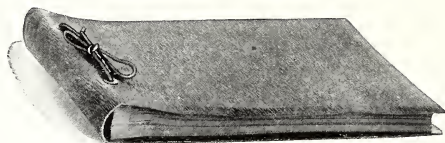
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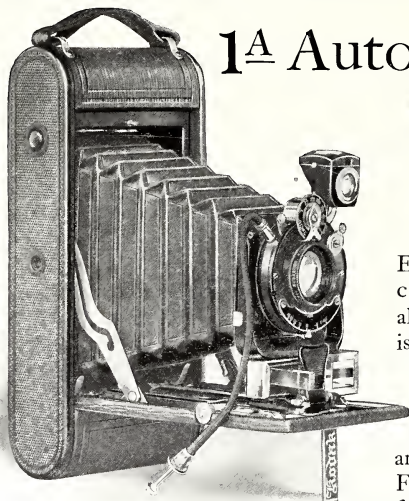
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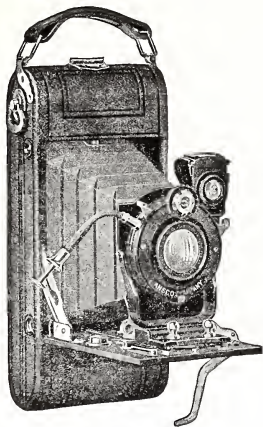
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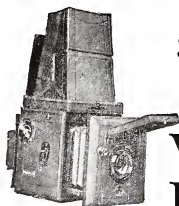
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Contents for September, 1921

ILLUSTRATIONS

The Dairy-Maid	Wilfred A. French	Cover
The Dairy-Maid	Wilfred A. French	Frontispiece
The Ossipee Range from Mirror Lake	Turner and Osborne	112
Vista in Tuftonboro	Turner and Osborne	113
Across Lake Wentworth	Turner and Osborne	113
Libby Museum, Wolfeboro, N.H.	Turner and Osborne	114
Mt. Chocoma, New Hampshire	Harry W. Poor	115
Mt. Monadnock—Beloved and Beautiful	Herbert W. Gleason	116
Family Burying-Ground	Turner and Osborne	117
The Willow-Farm	Turner and Osborne	118
Canal in Lowell, Mass.	Turner and Osborne	119
Tranquil Waters—Lake Winnepesaukee	Turner and Osborne	120
Cheese Photographed by Its Own Light	A. J. Dadisman	122
Miss H.	Herbert B. Fisher	125
Woodland Pond	William S. Davis	126
Willows in the Mist	William S. Davis	127
Wooded Vista	William S. Davis	128
Forest-Tones	William S. Davis	129
Sunshine and Shade	William S. Davis	131
My First Photograph	Nancy Ford Cones	132
Music	Nancy Ford Cones	134
Summer	W. A. Burnham	137
The Ancient Aqueduct	Louis A. Dyar	138
First Prize—Summer-Sports	Dr. Frank P. Smart	141
Second Prize—Summer-Sports	F. W. G. Moebius	142
Third Prize—Summer-Sports	Kenneth D. Smith	143
First Prize—Beginners' Competition	P. H. M. Vanderbilt	147
Second Prize—Beginners' Competition	Arthur Gillam	148

ARTICLES

A Pilgrimage to Wolfeboro, New Hampshire, Part II.	Turner and Osborne	111
Simple Facts in Regard to Actinism of Light	George E. Blackham	121
Adapting a Verito to a Graflex	Herbert B. Fisher	123
The Pin-Hole and the Pictorialist	William S. Davis	126
My First Photograph	Nancy Ford Cones	132
Practical Observations of a Photo-Finisher	Henry J. Wiegner	135

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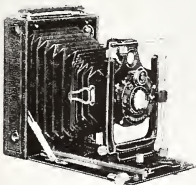
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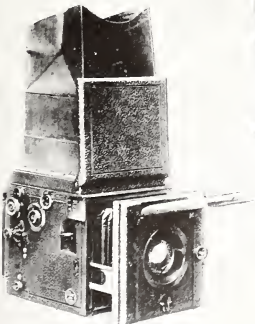
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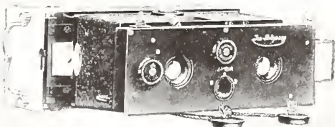
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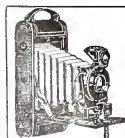
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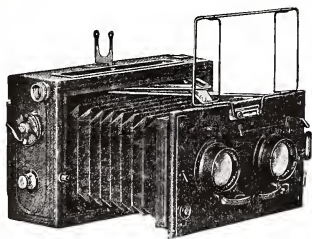
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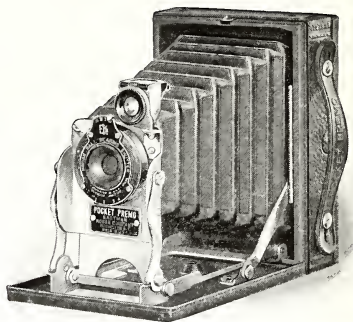
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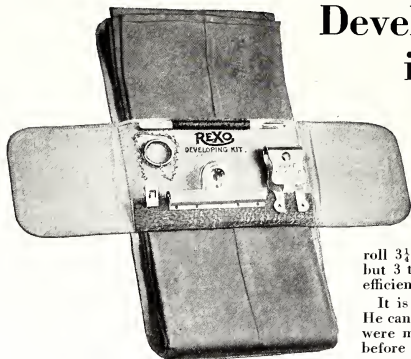
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Contents for October, 1921

ILLUSTRATIONS

The Mill at Nantucket.....	<i>R. E. Schouler.....</i>	Cover
Cotton.....	<i>Fannie T. Cassidy.....</i>	Frontispiece
Over the Hills and Far Away.....	<i>Dan McCowan.....</i>	166
Just Clouds, Hills and Water.....	<i>Dan McCowan.....</i>	167
Study of a Mule-Deer.....	<i>Dan McCowan.....</i>	168
Autumn.....	<i>Dan McCowan.....</i>	169
At Eventide.....	<i>Dan McCowan.....</i>	169
Rocky-Mountain Sheep.....	<i>Dan McCowan.....</i>	170
Winter-Scene.....	<i>Dan McCowan.....</i>	170
Wealth of Waterfalls.....	<i>Dan McCowan.....</i>	171
Mount Cascade, Banff.....	<i>J. Kirkland Hodges.....</i>	172
Hampton Roads.....	<i>E. M. Barker.....</i>	175
Falls Near Patapasco River.....	<i>E. M. Barker.....</i>	178
The Trout-Pool.....	<i>E. M. Barker.....</i>	179
The Mill at Nantucket.....	<i>R. E. Schouler.....</i>	181
My First Photograph.....	<i>Theodore Eitel.....</i>	185
Sentinels.....	<i>Theodore Eitel.....</i>	187
Boys with Goat.....	<i>Stockton Veazey.....</i>	188
Jumping Dog.....	<i>Stockton Veazey.....</i>	189
Captain on Bridge.....	<i>Stockton Veazey.....</i>	190
Birches.....	<i>Raymond E. Hanson.....</i>	192
First Prize—Summer-Flowers.....	<i>Taizo Kato.....</i>	195
Second Prize—Summer-Flowers.....	<i>John Dove.....</i>	196
Third Prize—Summer-Flowers.....	<i>Charles Lederle.....</i>	197
First Prize—Beginners' Competition.....	<i>Fred Bennett.....</i>	201
Second Prize—Beginners' Competition.....	<i>W. J. Burelbach.....</i>	202

ARTICLES

The Rocky Mountains Park of Canada.....	<i>Dan McCowan.....</i>	165
The Gloucester Camera Club.....	<i>Herbert B. Turner.....</i>	173
Remarks on Portrait-Films and Development.....	<i>E. M. Barker.....</i>	174
Reminders.....	<i>Frederick C. Davis.....</i>	182
My First Photograph.....	<i>Theodore Eitel.....</i>	184
Photographic Bread Upon the Waters.....	<i>Stockton Veazey.....</i>	188
An Obscure Cause of Staining.....	<i>The British Journal.....</i>	191

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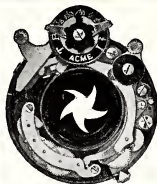
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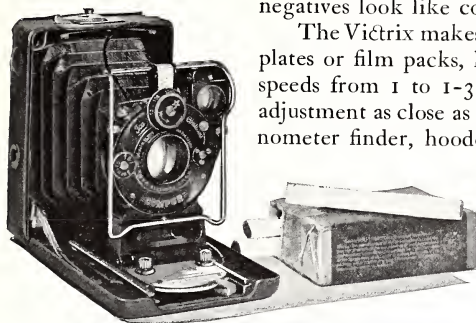
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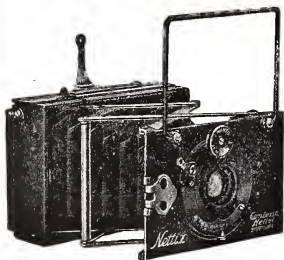
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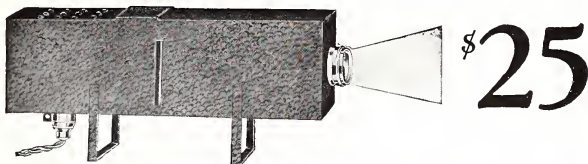
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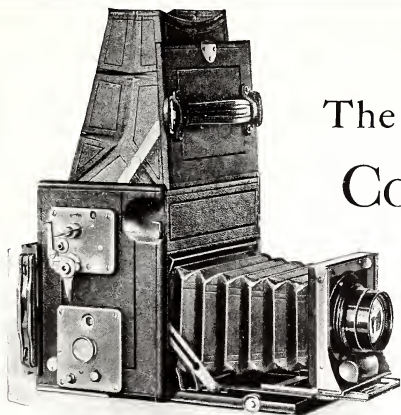
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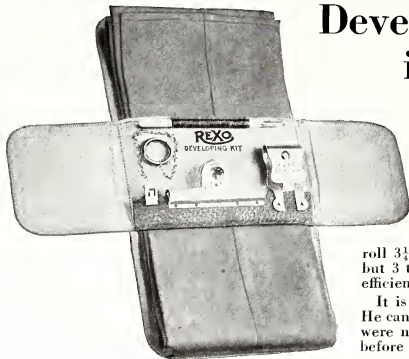
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Contents for November, 1921

ILLUSTRATIONS

The Strutter	<i>John Smith</i>	Cover
Sisterly Instruction	<i>Raffaele Menocchio</i>	Frontispiece
Which is Which?	<i>W. H. Brown</i>	221
On the Quay, Papeete	<i>Dr. J. Moir Datzell</i>	222
Papeete	<i>Dr. J. Moir Datzell</i>	223
On the Shore, Tahiti	<i>Dr. J. Moir Datzell</i>	223
Rue de Rivoli, Papeete	<i>Dr. J. Moir Datzell</i>	224
Quai de l'Uramie, Papeete	<i>Dr. J. Moir Datzell</i>	225
South-Sea Islander	<i>Dr. J. Moir Datzell</i>	226
"Where the Breakers Croon"	<i>Dr. J. Moir Datzell</i>	227
Fringe of the Lagoon	<i>Dr. J. Moir Datzell</i>	228
Diadème River, Tahiti	<i>Dr. J. Moir Datzell</i>	228
The Strutter	<i>John Smith</i>	237
My First Photograph	<i>Wm. H. Zerbe</i>	239
"Wearily Wending Their Homeward Way"	<i>Wm. H. Zerbe</i>	240
Mining Town	<i>Edwards W. Donaldson</i>	242
Heading in Mines	<i>Edwards W. Donaldson</i>	243
Photographic Party and Miners	<i>Edwards W. Donaldson</i>	245
Loader and His Buddy	<i>Edwards W. Donaldson</i>	245
Slate Fallen from Roof	<i>Edwards W. Donaldson</i>	246
Track Buried Under Slate	<i>Edwards W. Donaldson</i>	247
Emanuel Episcopal Church	<i>E. M. Barker</i>	248
First Prize—Marines	<i>F. W. G. Moebus</i>	251
Second Prize—Marines	<i>J. Herbert Saunders</i>	252
Third Prize—Marines	<i>William S. Davis</i>	253
First Prize—Beginners' Competition	<i>Charles Clayton, Jr.</i>	257
Second Prize—Beginners' Competition	<i>Channing W. Wilson</i>	258

ARTICLES

Selling Your Photographs	<i>Frederick C. Davis</i>	219
A Pearl of the Pacific	<i>Dr. J. Moir Datzell</i>	222
Experiences in Stereoscopic Photography	<i>A. Junculaz</i>	230
Development After Fixing	<i>A. Streissler</i>	236
A Brief for the Amateur	<i>Sigismund Blumann</i>	238
My First Photograph	<i>Wm. H. Zerbe</i>	239
Photography in a Coal-Mine	<i>Edwards W. Donaldson</i>	242

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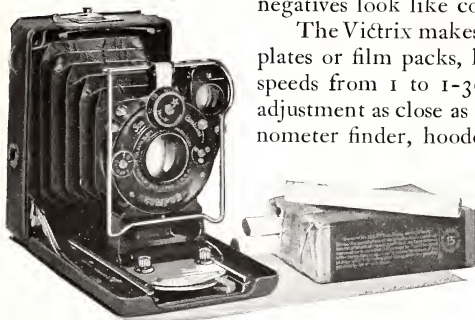
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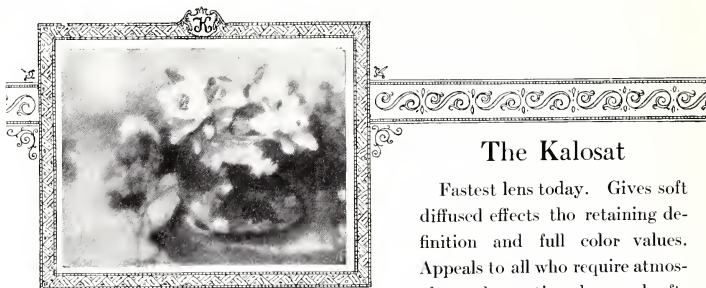
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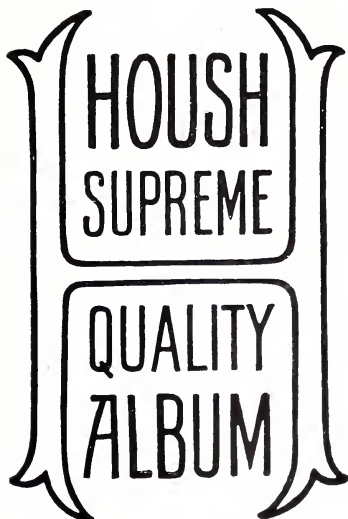
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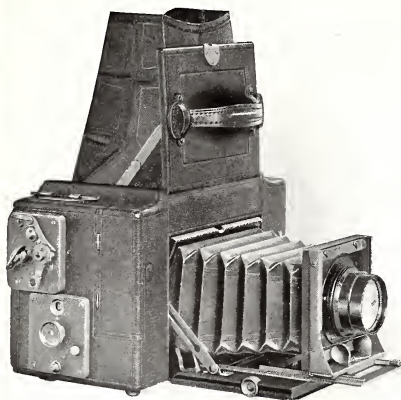
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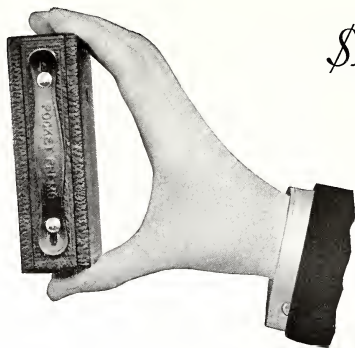
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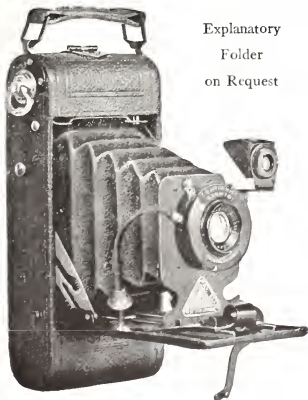
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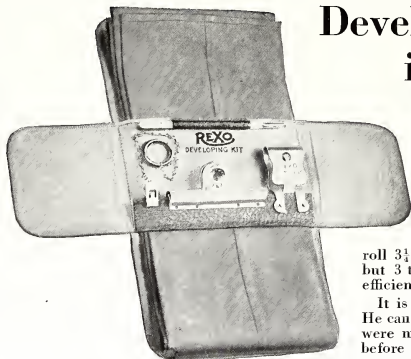


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Contents for December, 1921



ILLUSTRATIONS

In San Sui.....	Thomas S. Carpenter.....	Cover
A Florida Welcome.....	Thomas S. Carpenter.....	Frontispiece
Ponce de Leon Hotel.....	Thomas S. Carpenter.....	274
Open-Air Chess.....	Thomas S. Carpenter.....	275
Village Street-Scene.....	Thomas S. Carpenter.....	276
Sponge-Fleet.....	Thomas S. Carpenter.....	277
In San Sui.....	Thomas S. Carpenter.....	279
The Palamedes.....	Thomas S. Carpenter.....	280
A Florida Pastoral.....	Thomas S. Carpenter.....	283
A Jungle-Scene.....	Thomas S. Carpenter.....	284
Eucalyptus.....	Thomas S. Carpenter.....	286
The Village-Blacksmith.....	Herbert B. Turner.....	289
Modesty Assailed.....	Kenneth D. Smith.....	290
My First Photograph.....	Emily H. Hayden.....	291
The Baby Later On.....	Emily H. Hayden.....	293
Afternoon-Tea.....	Emily H. Hayden.....	295
A Touch of Winter.....	William J. Wilson.....	296
Oblivious.....	J. H. Field.....	298
Safety First.....	Fannie T. Cassidy.....	299
March-Floods.....	Kenneth D. Smith.....	301
The Chapel-Entrance.....	Alexander Murray.....	302
First Prize—Outdoor-Genres.....	J. Kirkland Hodges.....	305
Second Prize—Outdoor-Genres.....	J. H. Field.....	306
Third Prize—Outdoor-Genres.....	H. B. Rudolph.....	307
First Prize—Beginners' Competition.....	W. H. Pote.....	311
Honorable Mention—Outdoor-Genres.....	C. Ulrich, J. Sen.....	312

ARTICLES

Florida Impressions.....	Thomas S. Carpenter.....	273
Selling Your Photographs.....	Frederick C. Davis.....	287
My First Photograph.....	Emily H. Hayden.....	291
Illustrated Advertising.....	Photographische Industrie.....	294
Desensitising Autochrome Plates.....	A. and L. Lumière and A. Seyewetz.....	297
Amateur-Opposition.....	The British Journal.....	200

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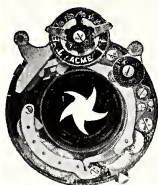
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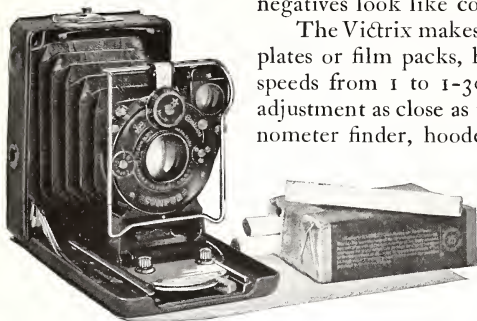
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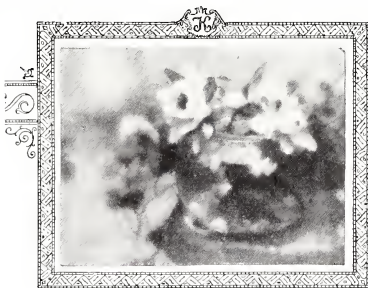
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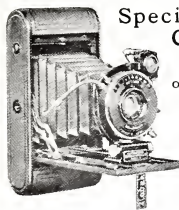
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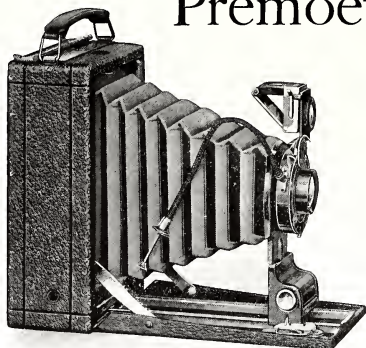
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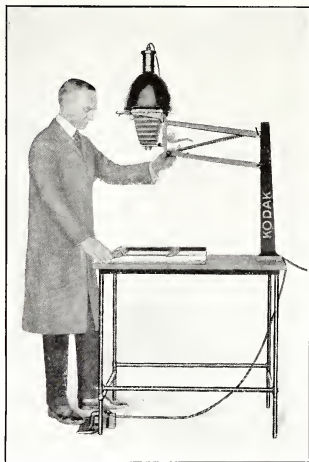
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*NOTE: The *f.7.7* lens cannot be fitted to these Premos: Pocket Premo, 5×7 size of Premos Nos. 8 and 9, Premo No. 10, Folding Cartridge Premos.*

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